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Language As A Mirror Of The World In Wittgenstein's "tractatus"

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LANGUAGE AS A MIRROR OF THE WORLD IN WITTGENSTEIN'S TRACTATUS

by

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ABSTRACT

The Wittgenstein of the Tractatus is in many ways a traditional philosopher. He is interested in traditional questions about the world, about the mind, and what can be known. However, one of the major contributions of the Tractatus is to show how a theory about language can enter into philosophical inquiry. When one constructs a theory about the world, a theory about language which supplements and corresponds to this ontological theory can be of value in arguing for that theory through the coherence that exists between ontological and linguistic claims. In Wittgenstein's case, there is an isomorphism between his analysis of facts and propositions - between the logical form of the world and the logic of propositions. My idea of the role of "completely analysed elementary propositions", which make up what has been called the "perspicuous language", is that they provide Wittgenstein with a simplified model through which he can present certain general features (in his eyes, essential features) of language. In contrast with my interpretation, many commentators have understood the perspicuous language as a language which Wittgenstein has constructed independently from his ontological position, and that he then "derived" his ontological position from his analysis of perspicuous propositions.

To show how Wittgenstein's theory of language supplements his theory about the world, I have argued that many of the passages in which Wittgenstein discusses language are concerned with ordinary language, in fact, with all of meaningful representation, and I

have been especially concerned to show how the passages in which Wittgenstein talks of elementary propositions are intended to shed light on the workings of ordinary language and meaningful representation of any kind. Two questions I discuss in detail are, first, the question of what Wittgenstein means by the terms "name" and "object". Wittgenstein believes that the meaning of a name is the object to which it refers, and that objects are particulars. The point of this is to establish how names and predicates combine in a particular logical way to depict facts. In non-elementary propositions, as well as perspicuous ones, the requirement is that subjects be qualified in some way or related to other logical subjects; propositional signs are facts as only facts can depict facts. A proposition is not just a collection of names or subjects. This leads to the notion of "logical form", Wittgenstein's claim being that a proposition must share its logical form with that to which it refers. The second question is this: what kinds of questions are of a sufficiently general nature that they can be answered by philosophical inquiry? As I see it, Wittgenstein's discussion of the "internal properties and relations" of propositions and facts is designed to shed further light on logical form. The logical form of a fact (or proposition) and the internal properties of the constituents of a fact are one and the same thing. Some have interpreted the Tractatus discussion of internal properties to say that there are synthetic a priori divisions among particulars or among properties, such that certain particulars cannot bear certain properties or combine in relations with certain other kinds of particulars. I argue that this is the kind of thing which, according to Tractatus doctrine, cannot be known a priori. We cannot

know, for instance, that there are impossible combinations of particulars. Wittgenstein's claim that there are internal properties of objects is really the claim that particulars are one kind of thing, that properties are another kind of thing, and that particulars, properties, and relations must combine with each other in certain ways - particulars must be qualified or stand in relation to each other in order to form facts.

This discussion of logical form extends beyond the internal characteristics of elementary propositions to a discussion of the propositions that can be generated from them. Meaningful propositions of ordinary language are truth-functionally analysable, an idea which was of particular importance in the philosophical and historical context of the Tractatus. The analysis of meaningful propositions is a logical analysis; such propositions must share their logical form with their referents. An understanding of the logical form of "molecular propositions" is given through the truth-tables, and a purely logical or linguistic explanation of the construction of molecular propositions is given.

Being interested in meaningful representation, Wittgenstein is interested in thought, which he sees as sharing certain features with language. I argue against certain interpretations according to which Wittgenstein identifies thought and language. This again is in keeping with my claim that Wittgenstein is interested in traditional philosophical questions and is in many ways not radically different from this tradition in his answers.

Acknowledgement

I wish to acknowledge the keen criticism and guidance of Professor Robert Binkley, who has been of great help to me in understanding the Tractatus and its place in modern philosophy.

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Introduction

The majority of the claims made in Wittgenstein's Tractatus are concerned with language. But it is not accurate to conclude from this that language, considered in isolation from other things, is the subject matter of that work. Rather, Wittgenstein is interested in the relation of the world to language, and of thought to language, and (especially) in those aspects or features of both thought and the world which are "reflected" or "depicted" in propositions. Wittgenstein's underlying thought throughout the Tractatus, a thought which unites these various interests, is that general features of the world are represented in language. That is, general, pervasive, and structural features of the non-linguistic world are matched with categories and logical properties of language.

The Tractatus presents a metaphysical system of a traditional sort and offers solutions to traditional philosophical problems. Some questions asked by philosophers are meaningless, Wittgenstein argues, and he presents a theory of meaning to establish this. Other questions, which on the theory should be considered meaningless also, are taken more seriously and thus the Tractatus offers a theory about categories, causation, mental entities, the synthetic a priori, and other topics commonly discussed among philosophers. In order to appreciate the essential unity of the Tractatus, a unity rooted in the idea that language mirrors the world, it is necessary to examine Wittgenstein's treatment of these particular philosophical issues, and the ground upon which he decides them. That is the strategy that I shall follow in this dissertation, restricting myself, however, to those issues

which seem to me most important for this purpose, and at the same time most interesting in their own right.

This interpretation of the Tractatus presupposes a certain view about Wittgenstein's philosophical method, a method which has been a subject of controversy among the commentators. The controversy involves two related questions, both focusing on the place of language in Wittgenstein's thought. First, does Wittgenstein argue from language to the world or from the world to language? Second, when Wittgenstein speaks of language does he mean ordinary language or does he mean an artificial "ideal" language? With respect to the second question, I.M. Copi tells us that Wittgenstein had a "tendency to reject ordinary language,"[1] and Russell says that

> He is concerned with the conditions for accurate symbolism, i.e. for symbolism in which a sentence 'means' something quite definite.[2]

With respect to the other question, while Russell does not, in fact, say that Wittgenstein derives his ontology from his theory of language, this is in fact Russell's own view. In the "Philosophy of Logical Atomism" Russell offers "a certain kind of logical doctrine, and on the basis of this a certain kind of metaphysic."[3] Others have attributed to Wittgenstein a similar position, one of arguing from language to the world -

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[1] I.M. Copi, "Objects, Properties, and Relations in the Tractatus", in Essays on Wittgenstein's Tractatus, ed. I.M. Copi and R.W. Beard (New York: the MacMillan Company, 1966), p. 169. (Hereafter referred to as Essays.)

[2] B. Russell, introduction to Wittgenstein, Tractatus Logico-Philosophicus, trans. D.F. Pears and B.F. McGuiness (London: Routledge and Kegan Paul, 1961) p. x. (Hereafter referred to as Tractatus.)

[3] B. Russell, "The Philosophy of Logical Atomism", in Logic and Knowledge, ed. R.C. Marsh (London: George Allen and Unwin Ltd., 1956), p. 178.

not from ordinary language, but from an artificial, "perspicuous language" (PL). D.F. Pears says that Wittgenstein

> tries to deduce the structure of reality from the lattice of elementary propositions which he believed to be the basic structure of all languages.[4]

PL is made up of elementary propositions which stand as the analysis of ordinary language, and I will begin the study of the characteristics of this language in chapter one. Pears is not alone in attributing this position to Wittgenstein. Max Black says that the Tractatus began

> as an effort to answer certain fundamental questions in the philosophy of logic and mathematics... no task could have seemed more fundamental... Wittgenstein expects a perspicuous view of the nature of logic to have ontological implications.[5]

and Copi says that

> language analysis...cannot have the importance for metaphysics that Russell and Wittgenstein have claimed, because their program does involve a vicious circle.[6]

Copi is correct in claiming that to use PL to determine the structure of the world would be circular, for one would first have to know the structure of the world to know if PL was perspicuous. If the interpretation of these commentators is correct, the argument of the Tractatus is circular.

Putting the views of these commentators together, we see that one way of answering the above questions is to say that Wittgenstein begins

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[4]D.F. Pears, Ludwig Wittgenstein (New York: Viking Press, 1969), p. 45.

[5]Max Black, A Companion to Wittgenstein's Tractatus (Ithaca, New York: Cornell University Press, 1964), p. 3.

[6]I.M. Copi, "Reply to Professor Bergmann", in The Linguistic Turn, ed. R. Rorty (Chicago: the University of Chicago Press, 1967), p. 135.

with consideration of a perspicuous language and, after determining the structure and rules of meaning for this language, goes on to use this knowledge in pursuing broader interests: interests concerning the nature of language, thought, and reality. There is certainly enough talk in the Tractatus of a special artificial language (the language, in fact, of a formal logic) to lend color to such views. However, to say that one is interested in a special artificial language is not to say that one is not interested in ordinary language. And furthermore, a different view emerges when we consider descriptions of Wittgenstein's work offered by Wittgenstein himself. In the preface to the Tractatus we find,

> The book deals with the problems of philosophy, and shows, I believe, that the reason why these problems are posed is that the logic of our language is misunderstood. The whole sense of the book might be summed up in the following words: what can be said at all can be said clearly, and what we cannot talk about we must pass over in silence.[7]

In a letter to Russell written shortly after Russell had received a typescript of the Tractatus, Wittenstein says,

> The main point is the theory of what can be expressed (gesagt) by propositions - i.e. by language (and what comes to the same, what can be thought) and what cannot be expressed by propositions, but only shown (gezeigt): which, I believe, is the cardinal problem of philosophy.[8]

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[7]Wittgenstein, Tractatus, p. 3.

[8]Wittgenstein's letter quoted by Anscombe in An Introduction to Wittgenstein's Tractatus (London: Hutchinson University Library, 1963), p. 161. (Hereafter referred to as Introduction.) The date of this letter is not given but it appears to relate to letters which Anscombe chose to include in the appendix of Wittgenstein, Notebooks, ed. Anscombe (Oxford: Basil Blackwell, 1961). An inspection of the appendix suggests 1919 as the year in which the letter was written.

Wittgenstein does not mention PL in these characterizations of the Tractatus. Wittgenstein "rejects" ordinary language only in the sense that he does not think that it is a good candidate for the title of "logically perfect language". Much of ordinary language is meaningful, yet some of it is not. As the development of my views in the following chapters will illustrate, I endorse the position of Richard Bernstein who, in speaking of PL, says

> The construction of such a language is a device by which we can become clearer about how any language works, not in all its complexity and tacit conventions, but primarily in the uses of sentences to make true and false sentences... The perspicuous language is an aid for understanding how language works... What is the purpose of this perspicuous language?... The point is to show how radically different naming and saying really are; to elucidate the nature of predication.[9]

While I agree with Bernstein's claims, I find other connections between PL and ordinary language. PL is an aid in understanding predication, but it also helps us understand the nature of subjects, logical connections, and the thoughts expressed in propositions. I will consider all these topics in the following chapters.

The Tractatus contains numerous claims about the structure of perspicuous propositions which are matched with counterpart claims describing the structure of facts. This isomorphism supports the interpretation that Wittgenstein, as one of the first philosophers to take the "linguistic turn", bases his ontology in a special, artificial language. However, I will try to show, through a consideration of Wittgenstein's linguistic method in action, that this method really

---

[9] R. Bernstein, "Wittgenstein's Three Languages", in Essays, pp. 235, 238.

consists in asking what is required for description of reality in any language whatsoever: priority is given to the question of what functions are performed by meaningful propositions or components of propositions. Wittgenstein's interest in this question is a metaphysical one, and he wishes to solve certain traditional ontological problems. Wittgenstein attempts to ground his ontological claims by arguing that their linguistic counterparts are descriptive of all meaningful language. Or, in expanded form, Wittgenstein's method is this:

1. A hypothesis is presented concerning the essential parts of a proposition, where that hypothesis is associated with a parallel hypothesis concerning the essential structure of reality.

2. The first hypothesis is checked against language: are there meaningful propositions which do not conform to the hypothesis? As many critics of the Tractatus have argued, many different kinds of propositions, such as those dealing with ethics, religion, and metaphysics, are meaningful. Wittgenstein ignores such subjects of discourse and takes science as definitive of the only possible subject matter of meaningful propositions. This move can have no rational justification (although the tradition of positivism supports it), and this observation provides an understanding of the failure of the Tractatus.

This problem aside, I contend that Wittgenstein's philosophical method is sound. Progress is made in ontology through the construction of simultaneous hypotheses about language and the world; confirmation is dependent upon the achievement of overall coherence. I do not feel committed to the ontological doctrines of the Tractatus, but I share with Wittgenstein the belief that the ontological pursuit is significant. I would insist, as a qualification on all of this, that the analysis of

particular languages, natural or artificial, in an attempt to understand the world can only succeed insofar as we do not place an impossible burden upon linguistic analysis, that of asking for results that do not deal with fully universal and essential features of language. Wittgenstein appreciates this point, and argues that the linguistic counterparts of his statements about the world and thought are true of all meaningful language. To elucidate this method, and to display the unity of Wittgenstein's various doctrines, I will discuss the areas of thought, logic, predication, and ontological categories before considering, in the last chapter, the limits to meaningful language as defined by PL. The first step of this program is to compare the ontological position of the Tractatus with its linguistic counterpart: the characterization of ordinary language and PL. This is the task of chapter one.

Chapter One

Language and Ontology

A first step towards understanding the meaning and purpose of the Tractatus is to understand the ontological hypotheses Wittgenstein makes, and to see them in relation to the parallel hypotheses he makes about language, both PL and ordinary language. One might question whether the ontology I present here is, in all respects, that of the author of the Tractatus. I will argue only briefly for my interpretation here, and will provide most of the evidence for it in later chapters. Wittgenstein explicitly describes the main features of his ontology, but certain further ontological theses, about which he appears to have little or nothing to say, are hidden in his discussion of language. Therefore a complete account of his ontology must be postponed until after his theory of language is presented.

I.

Wittgenstein begins the Tractatus with a discussion of facts. Facts make up the world.

> The world is the totality of facts, not of things. (1.1)

> For the totality of facts determines what is the case, and also whatever is not the case. (1.12)

> The world divides into facts. (1.2)

A fact is the existence of states of affairs.

> What is the case - a fact - is the existence of states of affairs. (2)

"States of affairs" is pluralized for a very good reason. While facts

can be compounds of other facts, a state of affairs (Sachverhalte) is atomic, and contains no other facts.

Facts occur with other facts, but they do so only in ways which can be described in truth-functionally analysable propositions. No relations exist among states of affairs.

> The structure of a fact consists of the structures of states of affairs.
>
> (2.034)
>
> The totality of existing states of affairs is the world.
>
> (2.04)
>
> States of affairs are independent of one another.
>
> (2.061)

That Wittgenstein held this view is also shown by what he says about the complete description of the world. For corresponding (in his view) to states of affairs are elementary propositions.

> If all true elementary propositions are given, the result is a complete description of the world. The world is completely described by giving all elementary propositions, and adding which of them are true and which false.
>
> (4.26)

Non-elementary propositions are used to describe non-atomic facts. But, if the position stated in these passages is to be maintained, these propositions must be truth-functionally analysable.

Wittgenstein calls the constituents of states of affairs "objects" or "things". One could call them "simple particulars". A state of affairs consists of objects standing in relation or bearing some property. While any state of affairs may, or may not, exist, and so is possible, its objects must exist. Any non-existent (but possible) state of affairs contains an object or objects which can be found in some fact - in some existent states of affairs.

> A state of affairs (a state of things) is a combination of objects (things).
>
> (2.01)
>
> Objects are what is unalterable and subsistent, their configuration is what is changing and unstable.
>
> (2.0271)
>
> The configuration of objects produces states of affairs.
>
> (2.0272)

A state of affairs is more than a collection of objects. Its objects must be connected together in one or another of various determinate relationships.

> Things are independent in so far as they can occur in all possible situations, but this form of independence is a form of connexion with states of affairs, a form of dependence. (It is impossible for words to appear in two different roles: by themselves, and in propositions.)
>
> (2.0122)
>
> In a state of affairs objects fit into one another like the links of a chain.
>
> (2.03)
>
> In a state of affairs objects stand in a determinate relation to one another.
>
> (2.031)
>
> The determinate way in which objects are connected in a state of affairs is the structure of the state of affairs.
>
> (2.032)

In a sense, relations, like objects, are essential components of atomic facts. However, in the next chapter I shall show that some states of affairs may consist of single objects bearing properties. A further question with respect to the status of properties and relations, Wittgenstein's position with respect to the issues of nominalism vs. realism, will be considered in that chapter.

States of affairs must be capable of analysis. Analysis requires that there are some facts that are atomic, and that objects are simple. That there are objects as the end point of analysis makes language possible.

> Objects contain the possibility of all situations.
> (2.014)
>
> Objects are simple.
> (2.02)
>
> Objects make up the substance of the world. That is why they cannot be composite.
> (2.021)
>
> If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true.
> (2.0211)

2.0211 is the first Tractatus passage linking ontology and theory of language. Wittgenstein's position on the matter of simplicity of objects may appear paradoxical. Probably no entity known to us in perception is an object, for perceptual items can be described as a complex of entities in configuration.[1] Furthermore, perceptual objects can cease to exist, while Wittgenstein's objects are, apparently, unalterable and persistent. Wittgenstein suggests that science is the search for states of affairs and objects, but he gives us no examples of objects.

II.

These ontological doctrines have their counterparts in Wittgenstein's theory of language. Some of these counterparts have already been mentioned. It is not always clear, in the Tractatus, when a statement about language is intended as a characterization of PL or of all meaningful language. This is one of the reasons for the diversity of interpretations, mentioned in the introduction, concerning Wittgenstein's interest or purpose. My belief is that certain remarks apply

---

[1]Russell believes, in contrast with Wittgenstein, that these perceptual simples are ontologically simple as well.

> "It is only when you use 'this' quite strictly, to stand for an actual object of sense, that it is really a proper name."

from "The Philosophy of Logical Atomism" in Logic and Knowledge, p. 201.

only to PL while others apply to all of language. Remarks about PL can be identified, usually, as those that mention names or elementary propositions. As a task of PL is to provide analyses of ordinary language propositions, I take all references to elementary propositions to be concerned with perspicuous representation of the world.

> The simplest kind of proposition, an elementary proposition, asserts the existence of a state of affairs.
> (4.21)
>
> It is a sign of a proposition's being elementary that there can be no elementary proposition contradicting it.
> (4.211)
>
> An elementary proposition consists of names. It is a nexus, a concatenation, of names.
> (4.22)
>
> It is obvious that the analysis of propositions must bring us to elementary propositions which consist of names in immediate combination.
> This raises the question how such combination into propositions comes about.
> (4.221)
>
> It is only in the nexus of an elementary proposition that a name occurs in a proposition.
> (4.23)

Could an elementary proposition be unanalysed, that is, non-perspicuous? Wittgenstein appears to reject, or at least ignore, this possibility. A fully analysed proposition would contain no defined terms. And as we shall see in the next chapter's discussion of predication, both "realistic" and "nominalistic" interpretations of the Tractatus assert, presumably on the basis of 4.22 and 4.221, that the only terms of elementary propositions are names. I will proceed with the assumption that elementary propositions are perspicuous ones.

In this section I will consider features of propositions, perspicuous or otherwise, which are characteristic of them as pictures. As I argued in the introduction, Wittgenstein offers a theory about all of meaningful discourse. Indicative of Wittgenstein's broad interests is

his inclusion of thought under the label of "picture"; all meaningful propositions and thoughts are pictures.

> A picture is a model of reality.
>
> (2.12)
>
> In a picture objects have the elements of the picture corresponding to them.
>
> (2.13)
>
> A logical picture of facts is a thought.
>
> (3)
>
> A proposition is a picture of reality.
> A proposition is a model of reality as we imagine it.
>
> (4.01)
>
> A proposition is a picture of reality: for if I understand a proposition, I know the situation that it represents. And I understand the proposition without having had its sense explained to me.
>
> (4.021)

I take Wittgenstein's statements about pictures as descriptive of both language and thought. However, I will postpone detailed examination of thoughts as pictures, and the relationship between thought and language, to chapter five.

Let us look at Wittgenstein's notion of a meaningful proposition (picture). A proposition is meaningful if it refers to a logically possible state of affairs or combination of states of affairs. A state of affairs is complex. When we attempt to represent states of affairs, we must do so by relating certain terms which refer to constituents of the complexes to be represented. A meaningful proposition, one which refers to possible states of affairs, has <u>sense</u>. The relation among terms determines the sense of a proposition, which is to say that it determines which states of affairs are referred to by that proposition. The fact that the terms of a proposition stand in a certain relation guarantees that that to which it refers is possible.

> A picture represents a possible situation in logical space.
>
> (2.202)

> A picture contains the possibility of the situation that it represents.
>
> (2.203)
>
> A proposition determines a place in logical space. The existence of this logical place is guaranteed by the mere existence of the constituents - by the existence of the proposition with a sense.
>
> (3.4)

Not every relationship of propositional elements is a meaningful one. Wittgenstein is interested in distinguishing well-formed strings of words from others. Only a well-formed proposition can have sense. The relationship among terms of a proposition, the structure of a proposition, determines the form of that proposition. This form is identical with the form of the states of affairs depicted. That this form be shared by the proposition and that to which it refers is necessary in order that the one picture the other.

> If a fact is to be a picture, it must have something in common with what it depicts.
>
> (2.16)
>
> There must be something identical in a picture and what it depicts, to enable the one to be a picture of the other at all.
>
> (2.161)
>
> What a picture must have in common with reality, in order to be able to depict it - correctly or incorrectly - in the way it does, is its pictorial form.
>
> (2.17)
>
> A picture can depict any reality whose form it has.
>
> A spatial picture can depict anything spatial, a coloured one anything coloured, etc.
>
> (2.171)
>
> What any picture, of whatever form, must have in common with reality, in order to be able to depict it - correctly or incorrectly - in any way at all, is logical form, i.e. the form of reality.
>
> (2.18)

An understanding of the nature of form must be rooted in a comprehension of the Tractarian notion of a fact. States of affairs can be represented only by something real; a propositional sign is a fact.

> What constitutes a propositional sign is that in it

its elements (the words) stand in a determinate relation to one another.

A propositional sign is a fact. (3.14)

Only facts can express a sense, a set of names cannot. (3.142)

As we already know, a fact consists of objects standing in a determinate relationship to each other. This relationship, or structure, determines the pictorial form of a proposition.

The fact that the elements of a picture are related to each other in a determinate way represents that things are related to one another in the same way.

Let us call this connexion of its elements the structure of the picture, and let us call the possibility of this structure the pictorial form of the picture. (2.15)

Pictorial form is the possibility that things are related to one another in the same way as the elements of the picture. (2.151)

Form is linked very closely with possibility. What makes a picture have the sense it does is that its structure was selected from a set of possible structures, which includes other structures the picture might have had instead.

When I make a picture I connect the elements in a certain way, giving them a certain structure. I connect them in this way rather than in any other of the possible ways of connecting them. The full range of these possibilities is the form of the picture. This idea is analogous to what might be called alphabetical form. A word will have a certain letter at each of its letter places. Let us call the possibilities available for each letter place the alphabetical form. Thus "cat" has an "a" in the middle. When I write "a", I am really writing "a <u>rather than the other possibilities</u>". As a first approximation to the notion of form, we can say that form is the whole range of possibilities from

which the letters "c", "a", and "t" were selected for each letter place.

But the alphabetical form of a word is more than the possibilities available for each letter place. The letter places of a word correspond to the subject places of a proposition. Corresponding to the predicate of a proposition is the relation that can hold among the letters of a word. There are six possible ways to relate "c", "a", and "t" in a linear sequence. In a proposition, the relation among subjects is one of many possible ones. The predicate expression (for instance, "R" in "aRb", "F" in "Fa") is a determinant of this relation.

> Instead of, 'The complex sign "aRb" says that a stands to b in the relation R', we ought to put, 'That "a" stands to "b" in a certain relation says that aRb.' (3.1432)

The relationships from which a predicate is chosen are determined by two things: the different spatial relationships which can hold in well-formed propositions, and the possible predicate expressions. In written language, predicate expressions, together with a purely spatial relationship, determine the relations (structures) among subjects in a meaningful proposition. (In the case of a proposition containing only one subject, a property of that subject becomes the predicate of that proposition.) B.F.-McGuiness describes the role of structure in determining form in this way.

> ...that John loves Mary is (let us suppose) a fact, so it is a structure. It is of the form "that x loves y" or of the form "that x loves but is not identical with y" or of the form that x stands in a relation to y" or of the form "that something is true of an ordered couple of objects" or of the form "that something is true of one or more objects." Of course all facts are of the last of these forms. The fact or the structure that John loves Mary can be said to be of each or all of these forms, for each of them defines a range of facts and states

> of affairs that may or may not hold, such that one fact or state of affairs among these, one possible instantiation of each of these forms, is: that John loves Mary. If we had to say which of all these was the form of the fact John loves Mary, we should probably say that "that x stands in a relation to y" was the form. To avoid difficulties arising from the particular example and irrelevant to the general case, let us say that the form par preference of the fact that aRb is $\overline{\phi}(x,y)$.[2]

McGuiness mentions the most general form of a proposition: "that something is true of one or more objects." But the critical kind of form - that required for perspicuous representation - is that referring to a possible connection among n subjects.

> If we turn a constituent of a proposition into a variable, there is a class of propositions all of which are values of the resulting variable proposition. In general, this class too will be dependent on the meaning that our arbitrary conventions have given to parts of the original proposition. But if all the signs in it that have arbitrarily determined meanings are turned into variables, we shall still get a class of this kind. This one, however, is not dependent on any convention, but solely on the nature of the proposition. It corresponds to a logical form - a logical prototype.
>
> (3.315)
>
> To stipulate values for a propositional variable is to give the propositions whose common characteristic the variable is.
>
> The stipulation is a description of those propositions.
>
> (3.317)

When we turn all the constituents of a proposition p into variables, we have an expression, a propositional variable, which is an expression of the form of all those propositions having the same form as p.

The most general type of form, "that something is true of one or more objects" is not so general that it fails to tell us something about

---

[2] B.F. McGuiness, "Pictures and Form in Wittgenstein's Tractatus", in Essays, pp. 145-146.

propositions and states of affairs. Wittgenstein emphasizes that the requirement for form is a requirement that propositions and states of affairs be structured. That facts have form tells us that they consist of objects qualified or related in one way or another.

III.

Wittgenstein says that a proposition has a logical form which, like pictorial form, must be shared with that to which the proposition refers. 2.18 (quoted p. 6) says that logical form is common to a proposition and the states of affairs it depicts. Wittgenstein is ambiguous concerning the distinction, if any, between logical form and pictorial form. On the one hand he seems to suggest that they are identical:

> A picture whose pictorial form is logical form is called a logical picture.
>
> (2.181)
>
> Every picture is at the same time a logical one. (On the other hand, not every picture is, for example, a spatial one.)
>
> (2.182)

But it is hard to explain why Wittgenstein introduces two kinds of form if they are really the same. 2.171 says that there are different kinds of pictorial forms; perhaps logical form is one kind of pictorial form. 2.2, which in its German original speaks of die logische Form der Abbildung, also supports this distinction between logical and pictorial form. (Its English translation, "logico-pictorial form", does not.)

> A picture has a logico-pictorial form in common with what it depicts.
>
> (2.2)

A variation of this view would be that pictorial form is the apparent logical form of a proposition, but the pictorial form and logical form of a proposition coincide only when that proposition is perspicuous.

Only in the perspicuous case is the apparent logical form - the pictorial form - the real logical form of a proposition; to know the logical form of a non-perspicuous proposition, we must find a perspicuous proposition, equivalent in meaning, and examine its structure.

With this interpretation it is possible to explain why Wittgenstein would speak of two different kinds of forms. The problem is, however, that Wittgenstein does not see the need to clearly distinguish the two. After 2.22 pictorial form is not mentioned again, while logical form is a continually repeated theme of the Tractatus.

Although a proposition is a picture, its apparent logical form and its real logical form may not be the same.

> Man possesses the ability to construct languages capable of expressing every sense, without having any idea how each word has meaning or what its meaning is - just as people speak without knowing how the individual sounds are produced.
>
> Everyday language is a part of the human organism and is no less complicated than it.
>
> It is not humanly possible to gather immediately from it what the logic of language is.
>
> Language disguises thought. So much so, that from the outward form of the clothing it is impossible to infer the form of the thought beneath it, because the outward form of the clothing is not designed to reveal the form of the body, but for entirely different purposes.
>
> The tacit conventions on which the understanding of everyday language depends are enormously complicated. (4.002)
>
> All philosophy is a 'critique of language' (though not in Mauthner's sense). It was Russell who performed the service of showing that the apparent logical form of a proposition need not be its real one. (4.031)[3]

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[3]See Gershon Weiler, "On Fritz Mauthner's Critique of Language", Mind 67 (1958). Weiler says that Wittgenstein and Mauthner both ask, "what are the jobs language can do and what is it that it cannot do?" (p. 87). But Mauthner rejected the idea that language pictures reality or that analysis could lead philosophers to a "perfect language".

A non- perspicuous proposition (probably every proposition of ordinary language is non-perspicuous) will not share its apparent (outward) form with the states of affairs it represents. Nevertheless, the structure of an ordinary language proposition is a determinant of its sense, and this structure presupposes a certain complexity, a plurality of elements in a proposition (see 4 ff.). These requirements must be met by any ordinary language proposition if it is to be meaningful. A proposition of ordinary language must have a form in the most general sense. It must be of the form "that something is true of one or more objects". It is essential that propositional signs consist of names or subjects bestowed with a certain property, or of names/subjects related to each other.

> At first sight a proposition - one set out on the printed page, for example - does not seem to be a picture of the reality with which it is concerned. But no more does musical notation at first sight seem to be a picture of music, nor our phonetic notation (the alphabet) to be a picture of our speech.
>
> And yet these sign-languages prove to be pictures, even in the ordinary sense, of what they represent.
>
> (4.011)

> A gramophone record, the musical idea, the written notes, and the sound-waves, all stand to one another in the same internal relation of depicting that holds between language and the world.
>
> They are all constructed according to a common logical pattern.
>
> (4.014)

Propositions of distinct languages may share the same logical form. Translation between various languages presupposes this common form.

> Definitions are rules for translating from one language into another. Any correct sign-language must be translatable into any other in accordance with such rules: it is <u>this</u> that they all have in common.
>
> (3.343)

> To understand a proposition means to know what is the case if it is true.
>
> (One can understand it, therefore, without knowing whether it is true.)

> It is understood by anyone who understands its constituents. (4.024)
>
> When translating one language into another, we do not proceed by translating each proposition of one into a proposition of the other, but merely by translating the constituents of propositions.
>
> (And the dictionary translates not only substantives, but also verbs, adjectives, and conjunctions, etc.; and it treats them all in the same way.) (4.025)

An especially interesting case of translation is that from ordinary language to perspicuous language. On the interpretation I am offering, translation into PL is necessary if one is to find the logical form of a proposition.

To translate a sentence of ordinary language into PL, we need to know both the rules connecting apparent and real logical forms and the definitions of terms occurring in the sentence to be translated. Wittgenstein does not answer one crucial question: What kinds of definitions are given to words of ordinary language? Are they determinate propositions of PL? Could they be given in some indeterminate form? Wittgenstein gives no examples of translations of non-logical terms into PL.

The goal of analysis is to arrive at "fully analyzed" elementary propositions, and this goal is reached when we have arrived at propositions containing no other terms than names.

> A proposition has one and only one complete analysis. (3.25)
>
> A name cannot be dissected any further by means of a definition: it is a primitive sign. (3.26)
>
> Every sign that has a definition signifies via the signs that serve to define it; and the definitions point the way.
>
> Two signs cannot signify in the same manner if one is primitive and the other is defined by means of primitive signs. Names cannot be anatomized by means of definitions. (This cannot be done to any sign that has a meaning independently and on its own.) (3.261)

The ontological counterpart of a name is an object. While propositions and their counterparts, states of affairs, have logical forms, names and objects figure in these forms and must hold a similar logical place in propositions and states of affairs.

> The possibility of its occurring in states of affairs is the form of an object. (2.0141)
>
> It is obvious that an imagined world, however different it may be from the real one, must have <u>something</u> - a form - in common with it. (2.022)
>
> Objects are just what constitute this unalterable form. (2.023)

The parallel between objects and names is striking. Objects hold the world together, giving it continuity, saving it from chaos. Names do the same thing for language: they have a meaning, and meanings are neither lost nor destroyed. The link is that the meaning of a name is a persistent object. Thus the form of an object (name) is to bear properties or stand in relation to other objects (names), persisting while relationships and properties come and go.

To this point I have not presented evidence for some of the claims I have made regarding Wittgenstein's ontology and theory of representation. Considering only that part of Wittgenstein's system I have presented so far, dispute exists with respect to the notions of logical form, predication, possibility, and the status of names and objects.

IV

We have seen that a form is a set of possibilities of different structures (or relationships). A form can be shared by facts and pictures of diverse structures, yet a picture must share its form with the state of affairs it depicts. There must be something common to the

structures of each in virtue of which their forms are said to be the same.

Wittgenstein's view can be understood more clearly if we contrast it with another way of describing the form of a proposition. Consider the sample proposition "aRb" of 3.1432. One way of characterizing the structure of "aRb" is to describe it as the relationship that exists among three terms: 'R', a predicate, and the subjects 'a' and 'b'. It is true that when I write "aRb" I choose 'R' from a set of possible letters, just as I choose 'a' and 'b' from another set of possible letters. But to construe the predicate expression 'R' as itself the predicate is to violate Wittgenstein's dictum that the form of a proposition must be held in common with the states of affairs to which it refers. If'R' could be a predicate, it would be an instance of a set of letters, where these letters constitute a whole range of possible predicates. But the form of a fact is defined in terms of that range of possible relationships of which the relationship in that fact is an instance. These two sets of possibilities - possible letters in propositions and possible relationships in facts - have little in common. And the three way relationship of 'a', 'R', and 'b' does not correspond with the binary relationship between the referents of 'a' and 'b'.

The relationship among subjects in a proposition, a relationship which may have to be defined in terms of the relation of subjects to predicate expression, can correspond to the structure of the state of affairs represented. In the case of perspicuous propositions, the actual physical relationships of terms must be the same degree as that of depicted states of affairs. (We shall see, in chapter two, how this fits with the claim that predicate expressions or terms do not occur in

PL.) And in any meaningful proposition, the requirement for shared form is the requirement that relationships among objects be represented by relationships among subject terms. In the limiting case, that of propositions containing one subject, it is the fact that the subject is qualified by being written in a certain relationship to a predicate expression that allows it to depict an object qualified in a certain way. (Again, more on the perspicuous representation of one-object states of affairs in chapter two.)

Notice that it is the form, rather than the structure or relationship, of a picture which must be shared with what it depicts. Failure to understand this point has contributed to the errors of commentators who, confusing structure with form, and failing to distinguish predicate expressions from predicates, have denied that a strict identity of form holds between a picture and what it depicts. J. O. Urmson says that Wittgenstein requires a "similarity of structure" between a proposition and that to which it refers.

> ...the similarity of structure lies in the fact that there is a general rule for the construction, or reconstruction, of one from the other.[4]

Urmson does not distinguish structure from form, and finds the suggestion of a general rule for the correlation of structures in states of affairs in Wittgenstein's discussion of rules of projection (4.014 ff.). Yet Urmson goes on to criticize this notion of similarity of structure, stating that what is called for is an identity of structure.

> If a law of projection is all that we require for similarity of structure, then the fact that we can find a law of projection connecting any

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[4]J.O. Urmson, Philosophical Analysis (Oxford: Clarendon Press, 1956), p. 88.

> drawing with any object reduces the significance of the demand for identity of structure almost to the vanishing point.[5]

Urmson criticizes both a requirement for similarity of structure and a requirement for identity of structure. But Wittgenstein's theory demands only that a picture and what it represents share the same form. In a perspicuous proposition (and all meaningful propositions have perspicuous correlates) the relation among names must be an instance of the same kind of relation as that holding among objects in the state of affairs represented. Ordinary language propositions must have form in the most general sense: they must consist of subjects which are, like "a" and "b" in "aRb", related or qualified in some way. That Urmson misses the point is clear in his conclusion that "it clearly cannot be held that these pictures are pictures in the specific way that a representative painting is a picture."[6] For the point is that propositions and paintings both represent in the same way.

J.W. Cornman holds a position similar to Urmson's, in that he confuses form with structure and believes that Wittgenstein calls for an identity of structure. He argues, however, that apparently dissimilar states of affairs can have an identity of structure enabling representation of one by the other.

> We must be clear about what it is for a picture to have the same structure as what it pictures, and how this identity of structure enables a picture to show what it pictures. For Wittgenstein the structure of a picture stands to the structure of what it pictures as the structure of a musical score stands to the structure of its music. That is, given the

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[5]Urmson, pp. 89-90

[6]Ibid., p. 87.

> musical score, we could read the music out of the score by means of the law of projection "connecting" the score and the music.[7]

It is clear why Cornman would weaken the identity requirement, since he takes it as a requirement that structures in picture and fact be identical. If one takes identity in a strong or literal sense, a requirement for identity of structure cannot be met in ordinary language, and it seems that even in PL many relations among elements of a fact cannot be reconstructed in a proposition. What proposition, for instance, could represent the distance of the sun from the earth if that proposition must have an identity of structure with its referent?

I reject the interpretations of Urmson and Cornman for two reasons. First, no recognition is given to the roles of pictorial and logical forms as entities distinct from structure. Secondly, both pictorial and logical forms seem to be construed as structure. It is obvious that if the Urmson - Cornman understanding of 2.15 ff. is correct, the identity requirement is, as Urmson says, insignificant.

V

Forms are not correlated by rules of projection, but structures are. The states of affairs referred to by a picture will have a structure different from that of the picture. Wittgenstein wishes to provide grounds for his conviction that a meaningful proposition must refer to possible states of affairs. A proposition is meaningful if it shows, through the fact that its elements are related in a certain way, that there are possible states of affairs having a structure, or a possible structure, to which the proposition is connected by a rule of projection.

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[7] J.W. Cornman, Metaphysics, Reference, and Language (New Haven: Yale University Press, 1966), p. 97.

The goal of analysis is to arrive at propositions in which the only terms are names, and which have pictorial (outward, apparent) forms which coincide with their true logical forms. The motivation for an actual analysis of propositions must be a practical one. There is no philosophical issue that will be solved when we have actually found or produced some elementary propositions. Wittgenstein has already made his decisions concerning the linguistic natures of propositions and their components, and has formulated his ontology. Knowledge of this ontology is necessary for an understanding of how language works - even for an understanding of how PL works.

In the introduction I concurred with the view of Bernstein, who believes that the role of PL is to aid us in understanding how ordinary language works. But we do not need examples of perspicuous propositions for this understanding. The purpose of analysis is not to arrive at a proper theory of language (and of the world); analysis presupposes theories about language and the world. As far as the Tractatus is concerned, we learn about PL by looking at other representations of states of affairs, and we see that they are all pictures. We do not need examples of perspicuous propositions, because there are other simple examples of pictures available. Consider,

> It is obvious that a proposition of the form 'aRb' strikes us as a picture. In this case the sign is obviously a likeness of what is signified. (4.012)
>
> In order to understand the essential nature of a proposition, we should consider hieroglyphic script, which depicts the facts that it describes.
> And alphabetic script developed out of it without losing what was essential to depiction. (4.016)

Wittgenstein also draws from the examples of musical notation, geometry,

and mechanics (4.013, 4.014, 4.04, 6.34 ff). All these cases are described by the theory of language encountered in the above discussions.

Although an understanding of language begins with simple examples of representation, PL must be postulated as an end point in analysis. In 4.002 Wittgenstein says that humans do not know the meaning of what they say, even though they succeed in communicating without this knowledge. The practical question is, what is the meaning of what I say? But Wittgenstein's question is, how do words and propositions represent the world? According to Wittgenstein, the answer to this question demands recognition of the fact that words of ordinary discourse refer to complexes, and that propositions made up of these words can be analysed into propositions containing names. The analysis itself is not important, but how it would proceed is crucial to an understanding of ordinary language. We must know that propositions, as pictures, are themselves facts, that they consist of subjects related to each other or bearing linguistically significant properties, and that propositions can only be anatomized truth-functionally.

Chapter Two

The Role and Meaning of Predicates in the Tractatus

I

PL is a language which "reflects" or shows certain features of its subject matter. Certain ontological distinctions, such as that between objects and facts, correspond to linguistic distinctions, in this case, to that between names and propositions. From one passage to the next, however, it is not always clear whether Wittgenstein is speaking of propositions of PL or of ordinary language. Nor is it always evident whether the linguistic differences under discussion are such as would reflect a difference in the world. A striking instance of these problems is generated in the following passage:

> It is obvious that a proposition of the form 'aRb' strikes us as a picture. In this case the sign is obviously a likeness of what is signified. (4.012)

Are propositions of the form 'aRb' found in PL? Are there relation signs like 'R' in PL? And do the answers to these questions reflect an ontological difference, perhaps that between particulars and properties or relations? It is to these questions that this chapter is devoted.

The ontological issue raised by these questions is that of the existence of universals. If universals exist, it must be the case that (a) entities in the world which are different in kind from particulars exist, and (b) these entities are capable of occurring as constituents of several atomic facts. Many commentators on the Tractatus

have been concerned with Wittgenstein's position on this matter.[1] The basic issue among them is whether or not properties and relations constitute one sort of Wittgenstein's objects. If properties are objects, they exist just as do any other objects making up states of affairs, and if properties are objects, they are objects which fulfill (a) and (b). Throughout this chapter, I will follow recent Tractatus commentary and call the view that properties and relations are objects the realistic interpretation; the view that they are not objects the nominalistic interpretation. However, it must be kept in mind that realism, as defined by (a) and (b), does not require that properties and relations be objects, and nominalism, as a position denying (a) or (b), is not established by a demonstration that properties and relations are not objects.

All parties to these issues grant that Wittgenstein's treatment of predicates is essentially linked with an ontological position.

> A name means an object. The object is its meaning.
>
> (3.203)

Names name objects. And, as we saw in chapter one, an elementary proposition consists "of names in immediate combination" (4.221). Consequently one way of dealing with this issue is to determine if names for properties or relations occur in PL. I shall conclude that there

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[1]For realistic interpretations of the Tractatus, see Erik Stenius, Wittgenstein's Tractatus (Oxford: Basil Blackwell, 1960), E. B. Allaire, "The Tractatus: Nominalistic or Realistic?" in Essays, and Gustav Bergmann, "Stenius on the Tractatus", in Logic and Knowledge (Madison: University of Wisconsin Press, 1964). Many nominalistic interpretations exist; the most notable are I. M. Copi, "Objects, Properties, and Relations in the Tractatus", in Essays, G. E. M. Anscombe, Introduction, B. F. McGuiness, "Pictures and Form in Wittgenstein's Tractatus", in Essays, Richard J. Bernstein, "Wittgenstein's Three Languages", in Essays, and Wilfred Sellars, "Naming and Saying", in Essays.

are no such names, that properties and relations are not objects. However, it will become evident in this discussion that while only "particulars" are objects, the Tractatus admits the existence of entities meeting requirements (a) and (b).

It is relevant to consider what the status of properties and relations might be if they are not objects. Consider,

> The configuration of objects produces states of affairs.
>
> (2.0272)

> The substance of the world can only determine a form, and not any material properties. For it is only by means of propositions that material properties are represented - only by the configuration of objects that they are produced.
>
> (2.0231)

Wittgenstein speaks here of the "configuration" of objects and of "material properties". Is a configuration a relation holding among objects in a state of affairs? Could it be a property of one object? While questions are raised here that cannot be answered immediately, there are here two alternatives for those interpretations denying properties and relations the status of objecthood. Both claim that relations have some place in Wittgenstein's system as "configurations" of objects. The first position asserts that properties are not constituents of atomic facts. A property is "produced" by a configuration holding among objects. The configuration itself is a relation among two or more objects. The second interpretation, for which I will argue, is that both relations and properties are configurations of objects. Properties may occur in states of affairs containing only one object; such a state of affairs would consist in the configuration of one object.

The first bit of evidence for the realistic account is the explicitly realistic statement of the Notebooks:

> Relations and properties, etc. are objects too.[2]

Wittgenstein does not clearly commit himself like this in the Tractatus, and the Notebooks, written two to four years before the Tractatus was submitted for publication, are not always a reliable guide in its interpretation. Realists have had a difficult time finding evidence for their view in the Tractatus itself. Their strongest argument has been that Wittgenstein often makes use of a "PMese" type language, containing predicates and predicate functions. A completely analysed proposition, a proposition of PL, has in it only names and logical terms.

> An elementary proposition consists of names. It is a nexus, a concatenation, of names. (4.22)

Suppose, as the realist does, that a proposition of the form "Fa" could occur in PL. The only terms in PL are names, thus "Fa" asserts that two objects - an object F, a property, named by the sign "F", and another object, a particular, named by "a" - are constituents of an atomic fact. Thus the question between the realist and the nominalist is whether PL, like PMese, contains predicate expressions.

Nominalists answer this question negatively. One argument for this view centers on this passage:

> ...the simultaneous presence of two colors at the same place in the visual field is impossible, in fact logically impossible, since it is ruled out by the logical structure of color.

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[2]Wittgenstein, Notebooks, p. 61e (June 16, 1915).

> (It is clear that the logical product of two elementary propositions can neither be a tautology nor a contradiction. The statement that a point has two different colors at the same time is a contradiction.)
>
> (6.3751)

Color predicates are not constituents of elementary propositions. Wittgenstein believes that an ascription of a color to an object, say, "a is blue", would logically exclude other color ascriptions, such as "a is red". Unlike propositions in which color predicates occur, elementary propositions are "independent" of one another.

> States of affairs are independent of one another.
>
> (2.061)
>
> From the existence or non-existence of one state of affairs it is impossible to infer the existence or non-existence of another.
>
> (2.062)
>
> It is a sign of a proposition's being elementary that there can be no elementary proposition contradicting it.
>
> (4.211)
>
> One elementary proposition cannot be deduced from another.
>
> (5.134)

Elementary propositions, as the linguistic counterparts of atomic states of affairs, are never contrary to others. "Red" and "blue", therefore, do not occur in elementary propositions and are not names of objects. I.M. Copi states that from 6.3751 it follows that no properties are objects, arguing that because colors are not objects no other properties are either.

> ...symbols that appear to be names of the simplest properties cannot occur in elementary propositions...If any properties are simple, specific colors ought to be counted among the simplest. If objects are (simple) properties, and elementary propositions consist of names of objects (4.22, 3.202, 3.203, 2.03), then the two propositions mentioned must be elementary propositions...It follows that color predications are

> not elementary propositions, and the implication seems clear that objects are not properties.[3]

In effect Copi offers two conclusions: that properties are not objects and that elementary propositions cannot predicate properties. From the second conclusion follows the view that properties are not involved in atomic facts in any way. I agree with the view that properties are not objects, but I find the argument based on 6.3751unconvincing. Furthermore, I reject the conclusion that elementary propositions cannot predicate properties.

In his defense of the realistic interpretation, E.B. Allaire points out that Copi ignores the possibility that color predicates be defined by simpler properties.

> The specific problem is: in what sense is 'this is red and this is blue' a contradiction? The general problem is: Given the truth-table explication of 'necessary' and 'contradictory', how can one show, as Wittgenstein hopes to, that what the tradition called synthetic a priori sentences express contradictions or necessities? I suggest that the denial that 'this is red' is atomic implies that 'red' is not indefinable, i.e. red is not simple, in the sense, not of being a configuration of particulars, but of being analysable into other simpler properties.[4]

Allaire may have in mind something like this. Suppose there are two simple properties (objects) f and g. Then "a is red" might be analysed as "fa . ~ga" while "a is blue" might be analysed as "~fa . ga". The "logical structure of color" would be such that to assert a is both red and blue is to assert a contradiction.

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[3]Copi, "Objects, Properties, and Relations in the Tractatus", in Essays, p. 183.

[4]Allaire, "The Tractatus, Nominalistic or Realistic?", in Essays, pp. 338-339.

There is, in Wittgenstein's demand for the independence of elementary propositions, a problem with both Copi's view and Allaire's, and the blame for this lies with the Tractatus itself. In 6.3751 Wittgenstein proposes a solution to a traditional problem without working out the consequences of his new program, consequences which themselves raise new problems. Suppose the realist is correct and that there are simple properties occurring in atomic facts. These simple properties are unusual in that what are ordinarily considered as properties are contrary to other properties, while these simple properties are not. This characteristic of contrariety is especially true of the usual candidates for the title of "simple property": properties of color, shape, or mass. But the simple properties of the realist cannot be contrary to others if atomic facts are independent. Thus they are unlike properties with which we are familiar.

Copi's conclusion is that properties are not constituents of atomic facts. States of affairs then would consist of two or more objects in relation. Copi says,

> All atomic facts are relational, and no elementary proposition in a "logical notation" can predicate a property of any object.[5]

Copi's reduction of properties to relations leaves unresolved the problem of the status of relations, for these relations, like the simple properties of the realist, are unlike any we know in everyday experience. Ordinarily, if a state of affairs is made up of particulars standing in relation, one would think that this state of affairs precludes the existence of at least some others made up of the same things standing in

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[5]Copi, loc. cit., p. 185.

different relations. For instance, if a is to the left of b, then b is not to the left of a.

I do not think this problem can be resolved. I conclude, as does Allaire, that 6.3751 does not commit Wittgenstein either to a nominalistic or a realistic standpoint. In 1929 Wittgenstein said that he had come to abandon his earlier view. In giving a new account of the problems associated with the "logic" of color and other properties, Wittgenstein reports that his new view

> contradicts an opinion which was published by me several years ago and which necessitated that atomic propositions could not exclude one another.[6]

Wittgenstein himself, as this paper shows, came to believe that the demand for the independence of elementary propositions could not be maintained.

I turn now to a second passage considered as support for a nominalistic reading of the Tractatus.

> Instead of, 'The complex sign "aRb" says that a stands to b in the relation R', we ought to put, 'that "a" stands to "b" in a certain relation says that aRb.' (3.1432)

This passage has been interpreted as saying that, in PL, propositions are expressed by juxtaposing various names of particulars in spatial relations. What I will call "relation signs" are excluded from elementary propositions. In the example used in 3.1432, "a" should be placed in a certain relation to "b" to express aRb; a proposition is like a diagram or map. This rule applies only to PL; ordinary language, of course, contains relation signs. Reasoning that an object is referred

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[6]Wittgenstein, "Some Remarks on Logical Form", in Essays, p. 35.

to by a name, nominalists believe that the exclusion of relation signs from PL shows that relations, as well as properties, are not objects. Copi says,

> Paragraph 3.1432 should rather be taken to forbid using the locution "The complex sign 'aRb' says 'a stands in the relation R to b'" of "an adequate notation". In ordinary language and also in the not yet adequate notation of Frege and Russell (3.325) the fact that aRb is expressed in a sentence 'aRb'... But not in the "adequate notation" Wittgenstein recommends. If it were, he would have written "...we must say, 'That "a" stands in a certain relation to "b" and to "R" says that aRb... In an "adequate notation" no propositional sign asserting that aRb contains the relation symbol 'R'.[7]

Copi's reason for interpreting this passage as applying only to PL is obvious: he reads it as an injunction against relation signs, and ordinary language does contain such signs.[8]

A correct understanding of the Tractatus would include recognition of the exclusion of predicate expressions from PL. 3.1432 figures in an argument establishing this conclusion. But this passage does not, by itself, exclude predicate expressions from PL. It is not concerned specifically with features of PL but is intended as a characterization of any meaningful proposition, including those that contain predicate expressions. This passage describes ordinary language as well as an alternative, artificial one; it asserts that propositions must consist of names standing in relation to each other, whether or not relation signs are used in facilitating this. 4.012, it may be recalled, asserts

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[7]Copi, loc. cit., p. 177.

[8]For another interpretation on which 3.1432 is concerned only with PL, see Anscombe, "Mr. Copi on Objects, Properties, and Relations in the Tractatus", in Essays, p. 187.

that it is "obvious" that "aRb" is a picture. It is not unlike a diagrammatic proposition "a b" in that it asserts a and b stand in a certain relation through the fact that "a" and "b" are related in a certain way. In "aRb", "R" determines the relation between "a" and "b".

The interpretation I am offering here has been given by Russell,[9] Stenius,[10] Sellars,[11] and Peter Long. In his diagnosis of 3.1432, Long says,

> ...the expressive relation in "A is next to B" is not one for which we have a name: it can only be described. Confining ourselves to the written script, it is the relation which "A" has to "B" through "A" being written to the left, and "B" to the right, of the sign "next to". It is this indirect, asymmetrical relation in which "A" stands to "B" which says that A is next to B... it is essential that a relation should be expressed by a relation between signs.[12]

'R' and 'next to' are not names, for they do not function as names do. Their purpose is to be used in forming diverse relations among names in order to determine a sense, and their function is to provide a convenient way of forming different relations among names. Names are not merely collected together to form a proposition; they are related to each other in one of two ways: without the use of other terms (diagrammatic form), or through the use of relation signs. I will call this relation among subjects, whether or not a relation sign figures in the relation, the "linguistic relation". It should be clear that relation

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[9]Russell, introduction to Tractatus, p. xi.

[10]Stenius, Wittgenstein's Tractatus, (Oxford: Basil Blackwell, 1960), pp. 130 ff.

[11]Sellars, "Naming & Saying", in Essays, p. 250.

[12]Long, "Are Predicates and Relational Expressions Incomplete?", in Philosophical Review, Vol. LXXVIII (January, 1969), p. 92.

signs are eliminable and might not occur in any proposition at all, but they are used to create a diversity of linguistic relations. Relation signs are used in written language because there are too few distinguishable and easily constructed spatial relations available for our use. The linguistic relation is a relation among subjects: in "aRb" the dyadic relation between "a" and "b" is the linguistic relation, the relation determining the sense of "aRb". The realistic view would demand that the linguistic relation be a triadic one - but the linguistic relation, for the realist, would have a different significance than it does here. Some realists also find a corresponding triadic relation in the states of affairs depicted by "aRb". The peculiarities of this view will be discussed after a few remarks concerning the nominalistic view.

Copi concludes that "R" is not a name in PL. This conclusion is correct. But in reading 3.1432 as a requirement that relation signs not occur in perspicuous propositions, he misses the point of the passage, which is to explain how relation signs function differently than subjects. His account cannot explain why Wittgenstein would object to relation signs in PL. 3.1432 is essential to the view that relation signs do not occur in PL. This position cannot be extracted from 3.1432, inasmuch as it is not concerned specifically with PL. The other premise necessary for this conclusion is that the only terms in PL are names. 3.1432 tells us that relation signs like "R" do not qualify as names.

Long provides us with a plausible account of the role of relation signs in language. Further evidence that this is Wittgenstein's view is found in the Notebooks:

> One must not say, "The complex sign 'aRb'" says that a stands in the relation R to b; but that "a" stands in a certain relation to "b" says that aRb.

> Only facts can express a sense, a set of names cannot. This is easily shown. In aRb it is not the complex that symbolizes but the fact that the symbol a stands in a certain relation to the symbol b. Thus facts are symbolized by facts, or more correctly, that a certain thing is the case in the symbol says that a certain thing is the case in the world.[13]

This passage begins with the same assertion as 3.1432. Wittgenstein makes it clear that he is not engaged in excluding "R" from PL. It is not that aRb should not be represented by "aRb", for the latter represents the former perfectly. Wittgenstein is interested in the problem of how relational facts are expressed in any proposition whatsoever. The linguistic relation, whether it consists of a relation of names to a relation sign or of a relation among names in a proposition containing no relation sign, is an essential feature of those facts used to depict others.

In this discussion of 3.1432 I have not mentioned non-relational properties. In discussing 6.3751 I argued that properties could occur in atomic states of affairs. 3.1432 in fact suggests a way in which both properties and relations could be signified by diagrammatic propositions, and it is consistent with it that properties occur in atomic facts. Consider a map representing mean precipitation or temperature over a large area. Different colors are used to represent different means. Thus properties of symbols, rather than symbols, are used in stating that those things to which the symbols refer have this or that property. In PL, one could represent the fact that an object had a certain property by a single name which itself has a "linguistic property".

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[13]Wittgenstein, Notebooks, Appendix I., p. 105. (The Notebooks were published in 1961, thus they postdate Copi's work by three years.)

Let us turn to the ontology implicit in 3.1432. Stenius claims that a corresponding analysis of facts follows from 3.1432's analysis of propositions. If "a" and "b" are names, a state of affairs depicted by "aRb" consists of two objects, a and b, and a dyadic relation connecting them. In "aRb", the fact that two names are related through the sign "R" depicts that state of affairs. Objects are different in kind from relations.

It must be stressed that the nominalism - realism issue, at least in non-Tractarian contexts, does not consist merely in the question of whether the label "object" can be ascribed to properties and relations. There are important ontological differences at issue. I believe that both realist and nominalist must account for Wittgenstein's assertion that mere collections of objects do not make up facts; an important feature of a fact is that it consists in the "configuration" of objects. This feature of facts is reflected in propositions: a proposition is more than a collection of subjects (names). One variation of the realistic view is that neither relations nor properties account for the "tying" of objects together in the formation of facts. If relations and properties are objects themselves, differing only from particulars in that the latter occur in only one place at a time, there must be another entity which is the tie among objects. Even though relations are essential ingredients of all states of affairs containing two or more particulars, relations, on this view, are like particulars in that they do not complete the task of connecting objects in a configuration. The realist must admit that Wittgenstein did not recognize a special tie among objects.

The realist could establish that relations and properties are objects if he could show that relations are named. Stenius finds such a suggestion in the Tractatus, conceding, however, that 3.1432 conflicts with this realistic interpretation. Stenius refers us to the following:

> In a proposition a thought can be expressed in such a way that elements of the propositional sign correspond to the objects of the thought.
>
> (3.2)
>
> I call such elements 'simple signs', and such a proposition 'completely analysed'.
>
> (3.201)
>
> The simple signs employed in propositions are called names.
>
> (3.202)
>
> A name means an object. The object is its meaning.
>
> (3.203)
>
> The configuration of objects in a situation corresponds to the configuration of simple signs in the propositional sign.
>
> (3.21)

If "R" in "aRb" is a simple sign, then relations are objects. In considering the propositional sign "mSe", which might assert that the moon is smaller than the earth, Stenius says,

> If we analyse /this/ sentence token as a fact in terms of three objects 'm', 'S', and 'e', and the triadic concatenation relation, and if we nevertheless want to say that the sentence depicts a state of affairs, then we must think of this state of affairs as composed of four elements, that is, three things: the moon, the earth and the smaller-than relation, and one triadic relation 'connecting' them to a fact.[14]

Stenius says that this realistic strain in the Tractatus demands that the state of affairs pictured by "aRb" consist of four elements. While Stenius does not accept this scheme, it summarizes precisely what some realists have believed. In his article "Stenius on the Tractatus",

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[14]Stenius, loc. cit., p. 137.

Gustav Bergmann speaks of a "nexus of exemplification" among objects, where certain objects are properties and relations.[15] The nexus of exemplification, the fourth element in the fact mSe, is not an ordinary spatial relation but is an ontologically necessary "connector". Stenius' reaction is,

> if this is how Wittgenstein thinks I believe it is convenient for the presentation of the remaining part of the Tractatus to correct him on this point.[16]

Stenius rejects the "false key of interpretation" which is that relation signs, like names, refer directly to constituents of states of affairs. Stenius says that rejection of the false key of interpretation is explicit in 3.1432, and he concludes,

> .../the key/ does not fulfill an important requirement which such a key should always satisfy, namely that corresponding elements should always belong to the same category. The name 'S' is an object

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[15]Bergmann, loc. cit., p. 248, says,

> How do 'Fa' and 'bɋc' manage to represent? To each constituent of the fact represented corresponds one constituent of the representing fact. The nexus connecting two simples...is represented by a relational thing connecting the two individuals which represent the simples. Such a correspondence is called an isomorphism... To understand the language is to know this isomorphism, which is partial and external. It is partial because...not every constituent of the representing fact (sentence) represents something. It is external because the represented and the representing constituents need not and often are not of the same ontological kind. In the fragment all subsistents are represented by characters; characters are represented by individuals. Only individuals are represented by individuals.

Here names represent both properties and relations. The nexus holding among particulars and these relations or properties is not itself a relation, but it is represented by the relation among names - the "relational thing connecting the two individuals /as in "Fa"/ which represent the simples."

[16]Stenius, loc. cit., p. 133.

> whereas the corresponding element of the prototype is a dyadic relation...if we further realize that there is no genuine triadic relation to connect the 'things', then it is natural to talk of this imagined triadic relation only in a metaphorical way and say that the things 'hang in one another, like the links of a chain' (2.03).[17]

Bergmann's position cannot be squared with the "key of interpretation" Stenius finds in 3.1432. He is anxious to show that Stenius' reading of 3.1432 is itself a correction. In his discussion of Stenius' treatment of the two keys of interpretation (the true and the false keys), Bergmann says

> ...he proposes to disregard the first, that is his correction, and bases his interpretation on 3.1432 and the second. But, then, why call interpretation what is really an original idea that may or may not have been suggested by a text which is notoriously contradictory as well as opaque?[18]

Stenius and Bergmann write before publication of the Notebooks which, as the quotation given on page 11 proves, support Stenius' interpretation of 3.1432.

I see no need to dissociate Wittgenstein's and Stenius' view by calling the latter a "correction". 3.1432 supplies what Stenius calls the true key of interpretation. On the other hand, I do not find, as does Stenius, a clear conflict of two keys of interpretation. One avenue of interpretation could be that the passages in which Stenius finds the false key describe perspicuous propositions only. In this context, the false key is not implied by them. Recall that these passages center on the point that simple signs are names and refer to

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[17]Stenius, loc. cit., pp. 131, 133.

[18]Bergmann, "Stenius on the Tractatus", loc. cit., p. 262.

objects. A premise necessary to Stenius' extraction of the false key is that relation (and property) signs are simple signs. But Wittgenstein may believe that a simple sign is always a name of a particular, and he may be trying, in these passages, to elucidate the maxim that no other signs occur in perspicuous propositions. Consider 3.201, a supposed source of the false key. It says that simple signs make up completely analysed propositions. Relation signs occur only in non-perspicuous propositions, and while objection might be made to calling them "complex" signs (we could say they are "incomplete"), they are not under consideration in the discussion of names (3.2ff). In this way 3.1432, which is not specifically concerned with perspicuous language, is not at odds with a significant portion of the Tractatus, but complements it. 4.221 says that elementary propositions consist of names "in immediate combination" and, given 3.1432, we must conclude "aRb" cannot be either elementary or perspicuous. But "aRb" is like all meaningful propositions, perspicuous or non-perspicuous, in that a relation among signs signifies a relation among things.

All realists and many nominalists interpret Wittgenstein's states of affairs as configurations of at least two objects. The basis for the agreement among realists is obvious, since their view is that properties are objects. Nominalists who hold that at least two objects are necessary in each state of affairs have held that all states of affairs are relational. 3.1432 is read as a prescription regarding PL only; names (like "a" and "b") which stand in spatial relationships with each other make up fully analysed elementary propositions. "Pluralistic nominalism", as we might call this interpretation, appeals not only to 6.3751 but to two passages which present

Wittgenstein's theory of facts.

> The configuration of objects produces states of affairs.
>
> (2.0272)
>
> The substance of the world can only determine a form, and not any material properties. For it is only by means of propositions that material properties are represented - only by the configuration of objects that they are produced.
>
> (2.0231)

Pluralistic nominalism takes 2.0272 to assert that states of affairs consist of a multiplicity of objects. 2.0231, according to this view, states that properties are not represented by any single element of a proposition, but rather arise from configurations of particulars.

The issue could be summed up: how are we to understand the notion that properties are "produced"? Anscombe, interpreting the Tractatus in pluralistic fashion, claims,

> /Red is/ a material property, and is therefore formed by a configuration of objects...by the same configuration of different objects in the different facts that exist when things are red.[19]

Pluralistic nominalism holds that properties are not represented within propositions of PL. Properties do not even have the ontological status of relations, which are constituents of atomic facts. Properties disappear upon analysis.

It is the task of any complete philosophical doctrine to account for predication. Let us consider ordinary language predicates connected to single subjects, as in the sentence "the thread is blue". What would be the sort of subject which would be qualified by property-predicates? Would it refer to states of affairs, an object, or a

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[19] Anscombe, Introduction, p. 111.

collection of objects? Anscombe would say something like this: the statement "the thread is blue" can be transcribed into a truth-functional compound of elementary propositions. No single term in this translation refers to the blueness of the thread. The predicate-expression "blue" corresponds to a configuration or set of relations common to many states of affairs; in this way a property is produced. The subject of the original sentence, "the thread", refers to the collection of objects having this configuration.

On the interpretation being developed in this chapter, the bold measures of pluralistic nominalism are unnecessary. There is no good reason to deny that properties could be constituents of atomic facts. If there is no a priori way of establishing what kinds of relations occur in possible states of affairs, it would seem that properties would be possible constituents of states of affairs too.

> It is supposed to be possible to answer a priori the question whether I can get into a position in which I need the sign for a 27-termed relation in order to signify something. (5.5541)
>
> But is it really legitimate even to ask such a question? Can we set a form of sign without knowing whether anything can correspond to it?
>
> Does it make sense to ask what there must be in order that something can be the case? (5.5542)
>
> The application of logic decides what elementary propositions there are.
>
> What belongs to its application, logic cannot anticipate. (5.557)

We might say that a property is a one-termed relation. And if there is no a priori way of deciding what kinds of relations exist, it is possible that properties qualify objects, forming states of affairs containing one object; a state of affairs may consist in the

"configuration" of one object. "Material properties", as I understand the phrase, refers to both properties and relations. To say that configurations of objects "produce" material properties is to say that properties and relations must occur in combination with particulars.

A similar reading of 2.0231 and 2.0272 is that argued for by Allaire. To be produced by a configuration, for Allaire, demands that we cannot know, a priori, what properties a thing has; the point of these passages is that "material properties are accidental and appear only in configurations."[20] Notice that this means, for a realist such as Allaire, that two or more objects are necessary in order for a configuration to occur.

Pluralistic nominalism is correct in its position that property and relation signs do not occur in PL. However, there is nothing in the Tractatus which requires us to deny that PL contains no propositions referring to one-object states of affairs. A perspicuous proposition is made up of names which are related directly, without a relation sign entering into the determination of that relation, or it contains one name which exemplifies a property not determined by a verbal property sign. According to Sellars, one can imagine

> that in a perspicuous language monadic atomic facts would be represented by writing the name of the single object they contain in various colors or in various styles of type.[21]

The Tractatus presents a theory about the nature of propositions as pictures - a theory which finds that all kinds of description have

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[20]Allaire, "The Tractatus': Nominalistic or Realistic", in Essays, p. 330.

[21]Sellars, "Naming & Saying", in Essays, p. 256.

essential features in common. It is incorrect to interpret 3.1432, or the Tractatus as a whole, as a work concerned only with the formulation of PL. In chapter one I spoke of Wittgenstein's interest in the rules of ordinary discourse. These rules, he believes, are complicated but nevertheless exhibit a common pattern. After telling us that "aRb" is a picture and that it is like its signification (4.012), Wittgenstein says

> And if we penetrate to the essence of this pictorial character, we see that it is not impaired by apparent irregularities (such as the use of # and b in musical notation).
>
> For even these irregularities depict what they are intended to express; only they do it in a different way.
>
> (4.013)
>
> It is only in so far as a proposition is logically segmented that it is a picture of a situation.
>
> (Even the proposition, Ambulo, is composite: for its stem with a different ending yields a different sense, and so does its ending with a different stem).
>
> (4.032)

Modern art and language share with early man's attempts at description the subject-predicate pattern; properties of signs or relations among signs are used to describe states of affairs. Just as a map colors in certain areas in green or brown to distinguish different elevations, hieroglyphic script consists of signs which contain certain properties which pick out "objects" by describing them.

> In order to understand the essential nature of a proposition, we should consider hieroglyphic script, which depicts the facts that it describes.
>
> And alphabetic script developed out of it without losing what was essential to depiction.
>
> (4.016)

The major difference between hieroglyphic script and modern written language is that most letters and words are meaningless when they occur alone. This is true of some hieroglyphic characters as well, for a

development in hieroglyphic script itself was that, through similarities in the sounds of spoken words, written characters came to refer to things without describing them. Description requires that such terms be used as subjects, which are qualified through their conjunction with other characters. In those cases where a character itself was a picture of a thing, this term could be used as a subject of a new predication: because several pictures are related in apparently significant ways, we go on to find that the fact that these characters are so related tells a story about the states of affairs depicted by the individual characters. Of course, as the translators of the Rosetta stone discovered, hieroglyphic script is not perspicuous.

In 4.016 Wittgenstein emphasizes that, although new conventions have replaced the old, the logic of language is the same. It is a measure of our sophistication that we can make statements using one word or many; consider the different kinds of printing used by businesses such as "Cadillac", "Pan-Am", and "Coca-Cola" when they use these words in advertisement. Properties of words are used to describe their objects. In the next chapter I shall consider subjects, although, insofar as the subject of discussion to this point has been pictures, predicates, and their ontological counterparts, I have been discussing subjects all along.

Wittgenstein offers a theory about all meaningful language, rather than one concerned solely with perspicuous representation. The principle that facts must be depicted by facts is explained as a correlation of qualified/related objects with the qualification of linguistic subjects by linguistic properties and relations. Wittgenstein is a "nominalist" only in the sense that properties and relations are not named. In PL,

no terms refer to properties or relations, but properties and relations are certainly features of atomic facts. Wittgenstein does not say that properties and relations are universal, that they recur in different facts, but there is no reason to deny that Wittgenstein is a realist in this sense.

Chapter Three

Simplicity and Form: A Discussion of Objects and Names

In this chapter I discuss two distinct but related aspects of Wittgenstein's philosophy. The first concerns the simplicity of objects and the special status of names as the only terms occurring in elementary propositions. In the second, I consider Wittgenstein's doctrine that components of propositions and facts have formal or "internal" properties and relations. In considering both issues we will find that the persuasive force of Wittgenstein's view lies in the coherence of linguistic and ontological principles.

I

This section elucidates Wittgenstein's commitment to logical atomism: the view that there are simple and indefinable words and objects. Wittgenstein believes that these simples are absolute and not simple relative to perception. They are not simple in relation to the indefinable terms of our language, but to all language and thought. I will return to the notion of simplicity in chapter six, where I will consider Wittgenstein's belief that knowledge of the simple objects of the world is given, or will someday be given, by science.

Names are the residue of analysis; they are linguistically simple.

> A name cannot be dissected any further by means of a definition: it is a primitive sign. (3.26)

Names are not capable of definition or analysis. No propositions describe that which is named by a simple sign. While propositions do assert that objects have certain properties or relations "external" to

them, they do not describe constituents or parts of objects. This means that to simple signs correspond objects which also are simple.

> Objects are simple.
> (2.02)
>
> Every statement about complexes can be resolved into a statement about their constituents and into the propositions that describe the complexes completely.
> (2.0201)
>
> Objects make up the substance of the world. That is why they cannot be composite.
> (2.021)
>
> The simple signs employed in propositions are called names.
> (3.202)
>
> A name means an object. The object is its meaning. ('A' is the same sign as 'A'.)
> (3.203)

There has been some confusion about the notion of simplicity in philosophical literature. D.F. Pears brings this out in his discussion of Russell's logical atomism:

> /Russell/ applied the phrase 'logical atomism' to two distinct theories. First, he applied it to the theory that every proposition has a complete analysis which consists entirely of symbols denoting things which we have to treat as simple, and he believed that he had established this theory. Secondly, he applied it to the theory that every proposition has a complete analysis which consists entirely of symbols denoting things which are intrinsically simple, and he regarded this theory as speculative, unlike Wittgenstein, who at the time when he wrote the Tractatus believed that he had established it.[1]

Russell's belief in simples in part stems from epistemological considerations, and for this reason he offers, in a not completely clear fashion, two doctrines: one that simples are absolute, another that simples are entities treated as such in the context of a given language

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[1]D.F. Pears, Bertrand Russell and the British Tradition in Philosophy, (New York: Random House, 1967), p. 145.

or perceptual field.

> ...the sort of last residue in analysis are logical atoms and not physical atoms. Some of them will be what I call 'particulars' - such things as little patches of colour or sounds, momentary things...[2]

Both Russell and Wittgenstein agree that to understand a name is to know what is named, but for Russell this is taken to mean that one is acquainted with (that is, one perceives) the entity named.

There is no evidence that Wittgenstein shared this view. Wittgenstein avoids the epistemological argument for simples which, with its reliance upon the principle of experiential acquaintance, cannot establish the existence of absolute simples. The absolute simplicity of terms of PL makes meaningful language possible. The simplicity of names is guaranteed because there is no way to refer to <u>parts</u> of simples: the referent of a name, an object, is also simple. Objects, which "make up the substance of the world" (2.021), persist through change.

> Objects contain the possibility of all situations. (2.014)
>
> Objects are simple. (2.02)
>
> It is obvious that an imagined world, however different it may be from the real one, must have <u>something</u> - a form - in common with it. (2.022)
>
> Objects are just what constitute this unalterable form. (2.023)

Compare Wittgenstein's view that objects are the ground of the possible as well as the actual, and the implication that objects persist indefinitely, with the Russellian view that particulars are momentary.

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[2]Bertrand Russell, "The Philosophy of Logical Atomism", <u>Logic and Knowledge</u>, p. 179.

Corresponding to each of these views is a characteristic doctrine concerning language. Wittgenstein believes that PL is, like all of language, public, and that it is possible that there be rules which would provide for the translation of propositions of one perspicuous language into another.

> Definitions are rules for translating from one language into another. Any correct sign-language must be translatable into any other in accordance with such rules: it is this that they all have in common.
>
> (3.343)
>
> The meanings of simple signs (words) must be explained to us if we are to understand them.
>
> With propositions, however, we make ourselves understood.
>
> (4.026)
>
> A proposition must use old expressions to communicate a new sense.
>
> (4.03)

Russell, whose epistemology speaks of "percepts" as the objects of awareness, is less inclined to admit that names can be publicly understood (that is, their reference known) and is of the opinion that 'this' and 'that' are the only suitable names that occur in ordinary (and not necessarily public) language. In this case as always, Wittgenstein's ontology parallels his theory of language. The meaning of a name is that to which it refers. The claim that a name, as an "old expression", retains its meaning through a period of time demands that objects be persistent entities which avoid destruction because they are simple.

Another strand of Tractatus thought leading to the idea that objects are simple is this,

> If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true.
>
> (2.0211)

> In that case we could not sketch out any picture of the world (true or false).
>
> (2.0212)
>
> It is obvious that the analysis of propositions must bring us to elementary propositions which consist of names in immediate combination.
>
> (4.221)

Perspicuous reference to a complex entity must be made through use of a complex symbol. This symbol contains symbols referring to components of the complex. But such analysis cannot go to infinity or language would be impossible. So it must stop, and the only way it can stop is with elementary propositions. It would seem that an actual analysis of meaningful propositions must be possible, since there is meaningful language. But Wittgenstein goes on to say that, in fact, it may not be possible to analyse any propositions at all.

> Even if the world is infinitely complex, so that every fact consists of infinitely many states of affairs and every state of affairs is composed of infinitely many objects, there would still have to be objects and states of affairs.
>
> (4.2211)

Evidently Wittgenstein did not regard this as a difficulty for his theory. Names are different from other linguistic signs, and this difference lies in a correspondence between simple name and simple object. But there may never be any names in our vocabulary. It should now be clear that we have here the "pure theory of objects". Wittgenstein defends the existence of that which at best could be called a "hypothetical entity": an entity which neither experience nor science has affirmed but which, the philosopher asserts, must exist.

II

In this section I will clarify some assertions Wittgenstein makes concerning internal relations and properties. Although not much new

information about names and objects is uncovered here, I will clear up some ambiguity in Wittgenstein's doctrine that certain truths are expressed, rather than stated, in language, and will try to establish Wittgenstein's views on what is, and what is not, within the realm of philosophical enquiry. Wittgenstein says that objects have "internal" or "formal" properties. On my view this means that objects are the sort of thing that combine in relation with other objects and bear properties, and that the world is composed of facts which consist of contingently configured objects. These things were discussed in chapters one and two, and my intention here is to tie them with the notions of internal properties and relations. One view of the Tractatus, put forward by Urmson and Allaire, states that Wittgenstein's notion of internal properties requires that particulars can be divided into categories according to the internal properties they hold, and that properties and relations themselves belong to kinds such that they can characterize only objects belonging to a corresponding category. I will argue against this interpretation on two grounds: that it fails to recognize an ambiguity in the use of the word "object" in the passages spelling out Wittgenstein's theory of internal properties, and that it depends upon a false idea of Wittgenstein's method.

Because objects are simple and are represented by linguistically simple names, every proposition which asserts that an object has a property or stands in a relation to other objects asserts something which is "external" to the object. This is to say that every proposition asserting a state of affairs is contingent, and no propositions assert that an object has a property or relation essential to it.

This is not to say that objects cannot have properties essential to them, only that one cannot predicate such properties of objects. Wittgenstein contrasts "material" properties (those properties or relations which correspond to meaningful predicates) with "formal" properties or, as he often calls them, "internal" or "structural" properties. Formal or internal properties are objects of knowledge even though we cannot refer to them in meaningful language.[3]

> In a certain sense we can talk about formal properties of objects and states of affairs, or, in the case of facts, about structural properties: and in the same sense about formal relations and structural relations.
>
> (Instead of 'structural property' I also say 'internal property'; instead of 'structural relation', 'internal relation'.
>
> I introduce these expressions in order to indicate the source of the confusion between internal relations and relations proper (external relations), which is very wide-spread among philosophers.)
>
> (4.122)
>
> If I am to know an object I also know all its possible occurrences in states of affairs.
>
> (Every one of these possibilities must be part of the nature of the object.)
>
> A new possibility cannot be discovered later.
>
> (2.0123)
>
> If I am to know an object, though I need not know its external properties, I must know all its internal properties.
>
> (2.01231)

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[3]In the last paragraph of 4.122 Wittgenstein mentions a problem which Moore and Russell had belabored ten and twenty years earlier. Moore and Russell are concerned primarily with relations, insofar as their view is a reaction against idealistic monism. Wittgenstein speaks in the same breath of both internal properties and relations, and does not decide whether forms of objects are ultimately relational or qualitative. Wittgenstein perceived that this was not the important question. Moore and Russell are not in full agreement themselves with respect to the definition of "internal relation". Another difference between the two viewpoints is that Moore and Russell never explicitly accept internal relations while Wittgenstein does. Wittgenstein may be referring to Moore and Russell as well as others when he refers to "the confusion between internal relations and relations proper".

> If all objects are given, then at the same time all possible states of affairs are also given. (2.0124)
>
> Each thing is, as it were, in a space of possible states of affairs. This space I can imagine empty, but I cannot imagine the thing without the space. (2.013)
>
> A spatial object must be situated in infinite space. (A spatial point is an argument-place.)
>
> A speck in the visual field, though it need not be red, must have some colour: it is, so to speak, surrounded by colour-space. Notes must have some pitch, objects of the sense of touch some degree of hardness, and so on. (2.0131)

According to Urmson and Allaire, what is being offered in these passages is a doctrine stating that the nature of an object - the internal properties characterizing it - determines the kinds of states of affairs that are possible for it. Objects could have natures of distinct sorts, and for this reason objects belong to exclusive categories. Some combinations of objects may be impossible.

Speaking of the Tractatus doctrine of objects, Urmson says,

> ...the type of object determines what facts it can logically enter into. One sort can enter into such facts as 'This is loud' or 'This is shrill', but not into such facts as 'This is red.' And the same, of course, applies vice versa.[4]

If this characterization is accurate, Wittgenstein's motivation is the traditional synthetic a priori divisions of categories. Some philosophers have distinguished between mental and physical substance, and have grounded such truths as "a color cannot be loud", "all bodies are extended", or "no minds have mass" in the fact that there are intrinsically different kinds of substances or particulars. E.B. Allaire says,

> Wittgenstein implies that particulars as well as properties are of different kinds. For example, there are visual and auditory particulars; colour and tone properties. That is, he implies that

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[4] J.O. Urmson, Philosophical Analysis, p. 58.

> being a property is a form (2.0131) whereas being a colour is a formal property (4.122 - 4.125). Though he is not very clear about the distinction, its import is not hard to divine. By taking colour and visual as formal properties, the function representing red shows that it can combine only with visual particulars. The reason for making formal properties so narrow is to cope with the issues of elementarism and the synthetic a priori.[5]

Allaire distinguishes forms (being an object, property, etc.) from formal properties. If color is a formal property, its being so - that it is a formal property of a certain object or set of objects - cannot be stated in PL. Instead it must be shown in elementary propositions.

The last paragraph of 4.122 says that internal properties "make themselves manifest" in propositions. Following this Wittgenstein says that propositions themselves have internal properties and relations.

> The existence of an internal property of a possibe situation is not expressed by means of a proposition: rather, it expresses itself in the proposition representing the situation by means of an internal property of that proposition.
>
> It would be just as nonsensical to assert that a proposition had a formal property as to deny it. (4.124)

> The existence of an internal relation between possible situations expresses itself in language by means of an internal relation between the propositions representing them. (4.125)

Urmson and Allaire would say that certain configurations of objects are impossible because objects fall into ontologically exclusive categories. Some objects are incapable of combining with each other in certain ways, are incapable of bearing certain properties, or are incapable of combining with objects of certain other categories. Correspondingly, it is

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[5]E.B. Allaire, "The 'Tractatus': Nominalistic or Realistic?", in Essays, p. 335.

an internal property of names and predicates of different categories that they cannot be combined in well-formed propositions. Another correspondence could be that certain essential features of objects, such as "being spatial", correspond to internal properties of names; the fact that an object's nature includes being spatial is "shown" or "manifested" in propositions containing that name.

We do not know just what internal properties, exclusive categories, and rules preventing strings of names would characterize PL. If Allaire and Urmson are correct, there are a priori rules preventing cross-category combinations of names and/or predicates that do not represent possible states of affairs. In contrast with this is my view that there are no a priori divisions among objects, or among properties and relations, at the atomic level. Before criticizing the Allaire-Urmson view, I will develop this alternative interpretation.

Wittgenstein's use of the term "object" is ambiguous: in certain passages it is used to refer to properties and relations as well as particulars. As objects in this broader sense, particulars, properties, and relations have different "logical forms" which find their reflection in language and determine what states of affairs are possible as well.

The ambiguous use of the term 'object' is explicit in the following remarks:

> When something falls under a formal concept as one of its objects, this cannot be expressed by means of a proposition. Instead it is shown in the very sign for this object. (A name shows that it signifies an object, a sign for a number that it signifies a number, etc.)
>
> Formal concepts cannot, in fact, be represented by means of a function, as concepts proper can.
>
> For their characteristics, formal properties, are not expressed by means of functions.
>
> The expression for a formal property is a feature of certain symbols.

So the sign for the characteristics of a formal concept is a distinctive feature of all symbols whose meanings fall under the concept.

So the expression for a formal concept is a propositional variable in which this distinctive feature alone is constant. (4.126)

The propositional variable signifies the formal concept, and its values signify the objects that fall under the concept. (4.127)

Wittgenstein speaks of properties as objects in 4.123:

A property is internal if it is unthinkable that its object should not possess it.

(This shade of blue and that one stand, eo ipso, in the internal relation of lighter to darker. It is unthinkable that these two objects should not stand in this relation.)

(Here the shifting use of the word 'object' corresponds to the shifting use of the words 'property' and 'relation'.) (4.123)

But the last parenthetical comment signals a looseness in the use of the word 'object' in these remarks. This fits with the listing of the various kinds of entities having internal properties in the first paragraph of 4.122 (given above) and the following:

Every variable is the sign for a formal concept.

For every variable represents a constant form that all its values possess, and this can be regarded as a formal property of those values. (4.1271)

...it is nonsensical to speak of the total number of objects.

The same applies to the words 'complex', 'fact', 'function', 'number', etc.

They all signify formal concepts, and are represented in conceptual notation by variables, not by functions or classes (as Frege and Russell believed). (4.1272)

If a formal concept is given, immediately any object falling under it is given. It is not possible, therefore, to introduce as primitive ideas objects belonging to a formal concept and the formal concept itself. So it is impossible, for example, to introduce as primitive ideas both the concept of a function and specific functions, as Russell does; or the concept of a number and particular numbers. (4.12721)

In these passages "object" is used indiscriminately, referring to "complexes", facts, predicates and numbers as well as particulars. These entities are distinguished because they have different formal or internal properties, which determine how they are combined with, or are constructed from, other entities.

Urmson's view that there are categories of particulars is, I suggested, based on certain passages in the 2's: passages stating that knowledge of what is possible is given by a knowledge of objects. These remarks are, prima facie, concerned with particulars. But if no discriminations among particulars are made, and if Wittgenstein's talk of internal properties of objects has reference to the categories of property and relation as well as facts, numbers, and so on, then Wittgenstein's discussion of possibility is designed to exhibit the roles of these other entities in determining what is possible.

To talk of formal properties is to talk of the form of an "object". Consider Stenius' paraphrase of 2.0124, which substitutes "objects and predicates" for "objects":

> If the system of all objects and predicates is given, then the system (p) of all states of affairs is given too.[6]

Stenius believes that there is an ambiguity in the term "object" in the original 2.0124. He asserts that a difference in category between an object and a quality is a difference in form. It is an internal property of an object (particular) to combine in relations with other particulars, or to exemplify some property. It is an internal property of properties to be exemplified by one object, of two-place relations to occur in states of affairs containing to particulars, and so forth.

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[6]Stenius, Wittgenstein's Tractatus, p. 67.

I have claimed that there are no divisions among particulars based on an a priori knowledge of natures or internal properties. One problem with this claim is that Wittgenstein appears to distinguish among forms of particulars.

> It would seem to be a sort of accident, if it turned out that a situation would fit a thing that could already exist entirely on its own.
>
> If things can occur in states of affairs, this possibility must be in them from the beginning.
>
> (Nothing in the province of logic can be merely possible. Logic deals with every possibility and all possibilities are its facts.)
>
> Just as we are quite unable to imagine spatial objects outside space or temporal objects outside time, so too there is no object that we can imagine excluded from the possibility of combining with others.
>
> If I can imagine objects combined in states of affairs, I cannot imagine them excluded from the possibility of such combinations.
>
> (2.0121)
>
> A spatial object must be situated in infinite space. (A spatial point is an argument-place.)
>
> A speck in the visual field, though it need not be red, must have some colour: it is, so to speak, surrounded by colour-space. Notes must have some pitch, objects of the sense of touch some degree of hardness, and so on.
>
> (2.0131)

In spite of the apparent similarity between these assertions and those of Urmson and Allaire, it is not necessary to say that a generic type of property, such as spatiality, determines a category of objects; that being spatial is one of many distinct natures of objects. Both passages assert that certain kinds of objects have certain kinds of properties and that it is an essential feature of objects to possess these properties. However, two of the four kinds of "objects" mentioned in 2.0131 (visual and tactual), if not all four, are not simple. As established in section I, simple objects are not given in perception. I think it is fair to say that Wittgenstein's use of "object" is ambiguous in more

ways than one; not only does it refer, in some instances of its use, to properties and relations, but it can refer to complexes. Again, the point is to tell us something about objects in the strict sense. The references to space, time, and color make the point that a simple object is essentially related to other objects or qualified in some way. Reiterating the point, Wittgenstein says,

> Objects contain the possibility of all situations. (2.014)
>
> The possibility of its occurring in states of affairs is the form of an object. (2.0141)

Notice that 2.0141 mentions the form of an object. 2.0121 is on this same theme. It states what the nature of particulars (as opposed to the nature of properties, relations, or complexes) is: to be possible constituents of states of affairs. Not only is a particular combined in the way it is with other particulars, it can occur in innumerable other states of affairs as well.

The only other reference to apparently specific natures of particulars is this,

> Space, time, and colour (being coloured) are forms of objects. (2.0251)

I interpret this passage in line with what I have said about 2.0121 and 2.0131. For 2.0251 must be compared with the following:

> The substance of the world can only determine a form, and not any material properties. For it is only by means of propositions that material properties are represented - only by the configuration of objects that they are produced. (2.0231)
>
> In a manner of speaking, objects are colourless. (2.0232)

Particulars do not have natures which distinguish them from other

particulars; they are "colourless". We cannot know, a priori, what kinds of property a particular can or cannot have.

Consider a simple world in which there are two objects, a and b, and one state of affairs, aR_1b. Knowledge of the constituents of this world is not enough to give a knowledge of what is possible. Other states of affairs are possible, and our language might contain the false proposition "aR_2b". Unlike names, predicates need not refer to existent properties or relations. Their meaning is given by a rule which sets up possible relations among subjects, and which projects these relations to possible configurations of objects.

Just as R_2 is not exemplified in our simple world, whole kinds of relations may be possible without being actualized. Spatial relations may never be actualized, but they are certainly possible.

> Each thing is, as it were, in a space of possible states of affairs. This space I can imagine empty, but I cannot imagine the thing without the space.
> (2.013)
>
> A picture represents a possible situation in logical space.
> (2.202)
>
> A proposition determines a place in logical space. The existence of this logical place is guaranteed by the mere existence of the constituents - by the existence of the proposition with a sense.
> (3.4)

In these passages the spatial metaphor comes clear. Like objects in space, particulars fit into a network with other particulars in a "logical space". But to understand this network, we must know more than what relations are in fact exemplified in the world; we must understand the general features of properties and relations. But there is no way of putting a limit on the kinds of relations there are beyond stating what a relation, in general, is. There is no a priori limit even on the numerical degree of a relation.

> It is supposed to be possible to answer a priori the question whether I can get into a position in which I need the sign for a 27-termed relation in order to signify something.
>
> (5.5541)
>
> But is it really legitimate even to ask such a question? Can we set up a form of sign without knowing whether anything can correspond to it?
>
> Does it make sense to ask what there must be in order that something be the case?
>
> (5.5542)
>
> Logic pervades the world: the limits of the world are also its limits.
>
> So we cannot say in logic, 'The world has this in it, and this, but not that.'
>
> For that would appear to presuppose that we were excluding certain possibilities, and this cannot be the case, since it would require that logic should go beyond the limits of the world; for only in that way could it view those limits from the other side as well.
>
> We cannot think what we cannot think; so what we cannot think we cannot say either.
>
> (5.61)

A knowledge of what is possible is equivalent to knowledge of the form and content of the world. The only limits on the form of the world are those of an ontological nature. We can know, a priori, the form of the world: there are objects and they are the kind of thing ("object" in a broader sense) which combine in relations with other objects and bear properties. As established in section I, to know what states of affairs are possible we need to know what particulars exist. This knowledge is not a priori. Objects are the persistent ground of all change, the latter notion being defined as the coming into existence, or passing out of existence, of facts. My reference to the content of the possible is intended to bring out Wittgenstein's idea that objects are the ground of the possible - if we know there are only twenty-six objects in the world, we know we do not need twenty-seven termed linguistic relations to describe any possible states of affairs. But if we have no idea of the number of objects, logic cannot help us decide if twenty-seven termed

relational states of affairs are possible.[7]

Parallel to the distinction between internal and external properties is that between what is shown and what is said in language.

> Propositions cannot represent logical form: it is mirrored in them.
> What finds its reflection in language, language cannot represent.
> What expresses itself in language, we cannot express by means of language.
> Propositions show the logical form of reality.
> They display it.
>
> (4.121)

It does not strike Wittgenstein as bizarre that knowledge of the general form of elementary propositions is known in advance of the content of those propositions. Without making reference to the degree of linguistic relation, we know that elementary propositions consist of names configured in some way. In the Tractatus this point is dogmatic. It is less so in the Notebooks, where Wittgenstein reports,

> My difficulty surely consists in this: In all the propositions that occur to me there occur names, which, however, must disappear on further analysis. I know that such a further analysis is possible, but am unable to carry it out completely. In spite of this I certainly seem to know that if the analysis were completely carried out, its result would have to be a proposition which once more contained names, relations, etc. In brief it looks as if in this way I knew a form without being acquainted with any single example of it.
> I see that the analysis can be carried farther, and can, so to speak, not imagine its leading to anything different from the species of propositions that I am familiar with.[8]

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[7]Combining this point with what was stated with regard to the show - say distinction in chapters one and two, we could say that propositions, whether true or false, state what in particular is possible, while what is possible with respect to form is shown by propositions.

[8]Wittgenstein, Notebooks (June 16, 1915), p. 61.

But in both the Notebooks and the Tractatus, what is known a priori about language is limited to a knowledge of types of symbol and possible combinations of such types.

> There are internal relations between one proposition and another; but a proposition cannot have to another the internal relation which a name has to the proposition of which it is a constituent, and which ought to be meant by saying it "occurs" in it. In this sense one proposition can't "occur" in another.
>
> Internal relations are relations between types, which can't be expressed in propositions, but are all shewn in the symbols themselves, and can be exhibited systematically in tautologies.[9]

We cannot know, a priori, that certain particulars fall into categories which do not allow of any relation or combination, nor do we know that certain relations and properties are incapable of being exemplified by particulars of certain kinds. That a particular is spatial, for instance, is not shown by the internal properties or relations of its name. There is nothing in language which shows or says that a certain combination of objects, or the bearing of a certain property by a certain object, is impossible.

That Wittgenstein speaks of "internal properties" of objects, and of terms corresponding with them, is indicative of his desire to communicate to us the essentiality of the fact that objects are configured: that they stand in relation and/or bear properties. If there is a world, there is at least one object. And this object must bear some property or stand in relation to other objects. If there is a world, there are facts.

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[9]Wittgenstein, Notebooks, Appendix II, p. 115.

Wittgenstein admits more to language than names (defined and undefined) and properties of and relations among them. There are also logical terms, which like subjects and predicates have internal properties and relations and contribute to the form of the propositions in which they occur. Chapter four will consider these features of logical terms.

Chapter Four

The Logic of the Tractatus

To this point I have focused my attention on elementary propositions and their ontological correlatives. Logical terms do not occur in elementary propositions, and there are three sorts of logical term considered in the Tractatus. There are (1) terms which connect or negate elementary propositions (hereafter referred to as "connectives"), those which (2) occur in propositions of general scope, that is, the existential and universal quantifiers, and there is (3) the sign for identity. There are distinct philosophical problems associated with each kind of logical term, and I shall discuss them in order in the three sections of this chapter. In each of these discussions we will find, once more, that Wittgenstein's argument makes sense when seen in the context of his overall objective: a coherence between linguistic and ontological hypotheses. In the context of the first issue, that of the role of the connectives, I shall discuss "logical form" as a feature of "molecular" propositions and states of affairs corresponding to them. The second discussion, that of logical quantifiers, arrives at the conclusion that propositions containing quantifiers can be analyzed into those that don't and that they do not occur in PL. Section three concerns identity and its representation in language. In this section I will discuss Wittgenstein's assertion that the identity sign is meaningless and that it does not occur in significant propositions. I will show that this is the only possible analysis of identity consistent with Wittgenstein's theory of meaning as reference and his notions of fact, object, and possible state of affairs.

I

One of the most intriguing claims of the Tractatus is that any meaningful proposition of ordinary language can be analyzed truth-functionally, that the analysis of a proposition is an elementary proposition or combination of elementary propositions. Logical relations among propositions thus have an important function in the Tractarian theory of meaning. Wittgenstein holds that logical connectives are not referential terms.

> My fundamental idea is that the 'logical constants' are not representatives; that there can be no representatives of the logic of facts.
>
> (4.0312)
>
> It is clear that a complex of the signs 'F' and 'T' has no object (or complex of objects) corresponding to it, just as there is none corresponding to the horizontal or vertical lines or to the brackets. There are no 'logical objects'.
>
> Of course the same applies to all signs that express what the schemata of 'T's' and 'F's' express.
>
> (4.441)
>
> At this point it becomes manifest that there are no 'logical objects' or 'logical constants' (in Frege's and Russell's sense).
>
> (5.4)

The fact that connectives do not refer does not imply that they, or propositions containing them, are nonsense. An understanding of the connectives is given through the truth-tables (or Wittgenstein's "bracket" method of expressing truth-conditions - 6.1203 ff.) which express the possibilities of existence and non-existence of states of affairs referred to by any legitimate proposition.

> Truth-possibilities of elementary propositions mean possibilities of existence and non-existence of states of affairs.
>
> (4.3)
>
> We can represent truth-possibilities by schemata of the following kind:

p	q	r
T	T	T
F	T	T
T	F	T
T	T	F
F	F	T
F	T	F
T	F	F
F	F	F

p	q
T	T
F	T
T	F
F	F

p
T
F

(4.31)

A proposition is an expression of agreement and disagreement with truth-possibilities of elementary propositions.

(4.4)

Truth-possibilities of elementary propositions are the conditions of the truth-conditions of the truth and falsity of propositions.

(4.41)

PL, which contains the analyses of all meaningful propositions, is a truth-functional language. That is, elementary propositions are characterized only by properties or relations defined by truth-tables.

Of special interest are certain compound propositions which are truth for all truth-possibilities or are false for all truth-possibilities: tautologies and contradictions. These propositions "lack sense".

Propositions show what they say: tautologies and contradictions show that they say nothing.

A tautology has no truth-conditions, since it is unconditionally true: and a contradiction is true on no condition.

Tautologies and contradictions lack sense.

(Like a point from which two arrows go out in opposite directions to one another.)

(For example, I know nothing about the weather when I know that it is either raining or not raining.)

(4.461)

Tautologies and contradictions are not pictures of reality. They do not represent any possible situations. For the former admit <u>all</u> possible situations, and the latter <u>none</u>.

In a tautology the conditions of agreement with the world - the representational relations - cancel one another, so that it does not stand in any representational relation to reality.

(4.462)

A tautology follows from all propositions: it says nothing.

(5.142)

Arguing from the fact that tautologies neither assert nor deny the existence of any state of affairs, and that no terms or propositions describe logical form, Gustav Bergmann has concluded that Wittgenstein denies logic "ontological status" or, in other words, that he denies the existence of logical form. Bergmann says,

> ...we are not surprised when we are also told that "logical form" is ineffable, merely shows itself. There is an easy transition, noticed, or, more likely, unnoticed, from being ineffable to being nothing, or what amounts to the same, not having any ontological status, not existing... A truth is logical if and only if the sentence expressing it is true by virtue of its "logical form" alone. But, then, we are also told that a sentence expressing a tautology (logical truth) really says nothing and is therefore not really a sentence. This supports my belief that, unwittingly, Wittgenstein walked that bridge. Whether or not he did, his answer does not recognize the ontological status of what, speaking philosophically, he calls "logical form".[1]

Bergmann's argument rests on two independent pieces of evidence: that logical form is "ineffable", meaning that no proposition asserts anything about it, and that tautologies do not have a sense. But Bergmann recognizes that tautologies and contradictions are not nonsense, and that Wittgenstein does talk about the logical form of facts. As I see it, this implies that Wittgenstein does give ontological status to logical form.

Bergmann says that to have ontological status and to exist are one and the same thing. Implicit in Bergmann's argument there is one dubious premise: that only what is spoken of in meaningful language has ontological status. Wittgenstein does not state this principle, and

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[1]G. Bergmann, "The Glory and the Misery of Ludwig Wittgenstein", in Essays, p. 346.

there is no reason to assume it to be implicit in the Tractatus. Perhaps Bergmann has in mind Wittgenstein's statement,

> What we cannot speak about we must pass over in silence.
>
> (7)

But this passage is a comment following a discussion of skepticism with respect to immortality, God, and mystical experience (6.4 ff). In discussing internal properties, we found that Wittgenstein believes that "In a certain sense we can talk about formal properties..." (4.122). When we do so we talk about things which are only shown in language. The paradoxical nature of this view should not dissuade us from thinking that Wittgenstein held it. Wittgenstein believes that a knowledge of the ineffable is consistent with our inability to say anything about it in PL or any other meaningful language.

Put inthis way, the issue reduces to whether Wittgenstein ignored logical form. But we know he did not. The important ontological question is whether or not he believes that logical form must be mentioned as one of the essential characteristics of the world and facts. Wittgenstein wishes us to take notice of logical form; it is not ignored.

In the Tractatus, logical form is mentioned as a feature of both elementary propositions and their compounds. With respect to elementary propositions and atomic states of affairs, the logical form and the "internal properties" of a proposition or state of affairs are the same thing. Logical form is an equally critical notion at the molecular level. Concerning ourselves with connections among facts, we find (cf. 4.0312) that connectives among propositions have no reference to connections among states of affairs. Yet (in 4.0312) Wittgenstein talks about a "logic of facts" for which there is no representative. This is

to say that there is no way to refer to the logic of facts; there is no way to talk about the logic of facts in PL or any language of which it is the analysis. Consider these assertions which are evidence of Wittgenstein's concern with the ontological status of logical form.

> Propositions can represent the whole of reality, but they cannot represent what they must have in common with reality in order to be able to represent it - logical form.
>
> (4.12)
>
> Propositions cannot represent logical form: it is mirrored in them.
>
> What finds its reflection in language, language cannot represent.
>
> What expresses itself in language, we cannot express by means of language.
>
> Propositions show the logical form of reality. They display it.
>
> (4.121)

Wittgenstein's point is not merely negative. While rejecting a simple theory on which connectives refer to connections among facts, Wittgenstein admits into his ontology "logical form". This is to say logical form exists.

An understanding of the fact that tautologies are not meaningless - even though they have no sense - demands recognition of logical form also.

> Tautologies and contradictions are not, however, nonsensical. They are part of the symbolism, just as '0' is part of the symbolism of arithmetic.
>
> (4.4611)
>
> The fact that the propositions of logic are tautologies shows the formal - logical - properties of language and the world.
>
> The fact that a tautology is yielded by this particular way of connecting its constituents characterizes the logic of its constituents.
>
> If propositions are to yield a tautology when they are connected in a certain way, they must have certain structural properties. So their yielding a tautology when combined in this way shows that they possess these structural properties.
>
> (6.12)

> The propositions of logic describe the scaffolding of the world, or rather they represent it. They have no 'subject-matter'. They presuppose that names have meaning and elementary propositions sense; and that is their connexion with the world. It is clear that something about the world must be indicated by the fact that certain combinations of symbols - whose essence involves the possession of a determinate character - are tautologies.
>
> (6.124)
>
> The logic of the world, which is shown in tautologies by the propositions of logic, is shown in equations by mathematics.
>
> (6.22)

Tautologies fail to assert any state of affairs, but they still show the logical form of the world. By construing the Tractatus in such a way as to deny any status to logical form is to prevent an understanding of what logical form is. Insofar as Wittgenstein himself talks about what is, putatively, only shown, it is fair to say that what "shows itself" in the truth-functional combination of elementary propositions is that states of affairs are independent from one another. No atomic state of affairs implies the existence or non-existence of any other. Recall, from chapter three, that a state of affairs determines a place in logical space. In the language of the spatial metaphor, no two propositions distinct in meaning compete for the same place in logical space.

I have argued that an important ontological question is whether logical form enters an account of how the world is put together. Wittgenstein explicitly mentions logical form in his description of the world.

> The facts in logical space are the world.
>
> (1.13)
>
> A proposition determines a place in logical space. The existence of this logical place is guaranteed by the mere existence of the constituents - by the existence of the proposition with a sense.
>
> (3.4)

> In geometry and logic alike place is a possibility: something can exist in it.
>
> (3.411)
>
> A proposition can determine only one place in logical space: nevertheless the whole of logical space must be given by it.
>
> (Otherwise negation, logical sum, logical product, etc., would introduce more and more new elements - in coordination.)
>
> (The logical scaffolding surrounding a picture determines logical space. The force of a proposition reaches through the whole of logical space.)
>
> (3.42)

The conclusion of this is not that logic, logical form, or logical space is "nothing", but that logical form does not consist of certain determinate relations among states of affairs. Wittgenstein's use of the phrase "logical space" suggests that there is a network into which states of affairs "fit". This is a notion which, as Bergmann underscores, cannot be expressed in language. States of affairs are independent, and this finds reflection in the fact that PL is a truth-functional language. An understanding of this is possible not through understanding the reference of connectives, but through a grasp of the notion of truth-possibilities as represented by truth-tables. In the explication of truth-tables, ontology and theory of language are brought together. 4.3 (quoted above) says that the "truth-possibilities" of a proposition - its molecular form - represent the possibilities for existence and non-existence of states of affairs. Just as language contains conditions, alternatives, and negations which are all instances of innumerable possible truth-values of elementary propositions, logical space - the possible - contains states of affairs of which some combinations are realized while others are not. The actual use of logical connectives facilitates reference to states of affairs in which we have particular interest. But the simplicity of the fact that states of affairs are

either actual or merely possible allows Wittgenstein to say,

> If all true elementary propositions are given, the result is a complete description of the world. The world is completely described by giving all elementary propositions, and adding which of them are true and which false.
>
> (4.26)

No connectives occur in this "complete description of the world", yet the logical form of the world is shown by this list. Any false elementary proposition could be true or any true elementary proposition could be false without affecting the truth value of any other elementary proposition.

II

In symbolic logic, general propositions are those propositions which contain existential or universal quantifiers. In ordinary language various words and phrases have the same or similar meanings as these quantifiers ("all", "everything", "something", etc.) but it is not always clear how these ordinary language expressions are to be taken. Some problems associated with the ordinary language expressions are those of existential import and the nature of the individuals that are to be taken as the domain of "abstract" nouns or phrases.

In formal logic, these ambiguities are removed by stipulations. In Wittgenstein's case, variables occurring in quantified propositions take names of objects as values.

> Names are the simple symbols: I indicate them by single letters ('x', 'y', 'z').
> I write elementary propositions as functions of names, so that they have the form 'fx', 'Ø(x,y)', etc.
> Or I indicate them by the letters 'p', 'q', 'r'.
>
> (4.24)

Wittgenstein suggests, however, that quantified propositions are not in fully analyzed form. Like propositions of ordinary language, they

are capable of analysis into elementary propositions. To be meaningful, a proposition containing quantifiers must be logically equivalent to a truth-functional compound of elementary propositions.

> A proposition is a truth-function of elementary propositions.
> (An elementary proposition is a truth-function of itself.)
> (5)
>
> If all true elementary propositions are given, the result is a complete description of the world. The world is completely described by giving all elementary propositions, and adding which of them are true and which false.
> (4.26)

This doctrine is also manifest in Wittgenstein's "general form of a proposition".

> The general form of a truth-function is $(p,\bar{\xi}, N(\bar{\xi}))$. This is the general form of a proposition.
> (6)
>
> What this says is just that every proposition is a result of successive applications to elementary propositions of the operation $N(\bar{\xi})$.
> (6.001)
>
> If $\bar{c}$ has as its values all the values of a function fx for all values of x, then $N(\bar{\xi}) = \sim(\exists x)\ fx$.
> (5.52)

This representation contains three elements. p stands for all elementary propositions. $\bar{\xi}$, a propositional variable, has as its values all the values of a certain function of the form "fx", and thus takes certain elementary propositions represented by p as values. $N(\bar{\xi})$ represents the simultaneous negation of the propositions which $\bar{\xi}$ takes as values. The claim that all truth-functions can be generated from this sign hangs on proof that the Scheffer stroke of simultaneous negation of two propositional variables is sufficient to express all logical combinations that occur in propositional logic.

Not only does Wittgenstein say that $(p,\bar{\xi}, N(\bar{\xi}))$ is the general form of a truth-function but that it is the general form of a proposition.

This is probably the source of Russell's reference to "Mr. Wittgenstein's theory of the derivation of general propositions from conjunctions and disjunctions".[2] Wittgenstein himself does not speak of conjunctions and disjunctions as the analysis of general propositions, but Russell's suggestion is credible, as the above passages indicate. Wittgenstein does not appear to be concerned with the demand for a finite conjunction of propositions:

> Even if the world is infinitely complex, so that every fact consists of infinitely many states of affairs and every state of affairs is composed of infinitely many objects, there would still have to be objects and states of affairs. (4.2211)

As Wittgenstein sees it, it is not necessary for his thesis that all propositions are truth-functions that there be a finite number of objects or states of affairs referred to by any proposition. One may wonder if Wittgenstein was actually aware of certain problems here. 4.2211 is a comment on 4.221:

> It is obvious that the analysis of propositions must bring us to elementary propositions which consist of names in immediate combination. (4.221)

Speaking of the truth-functional analysis demanded in this account, Max Black states,

> It is of great interest that Wittgenstein holds this position to be compatible with a universe that is 'infinitely complex' (4.2211) because it contains atomic facts with infinitely many constituents or complex facts constructed of infinitely many atomic ones. He does not appear to have been troubled by the obvious difficulty of how such infinite complexity could be adequately mirrored in language.[3]

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[2]Russell, introduction to Tractatus, p. xvi.

[3]Max Black, A Companion to Wittgenstein's 'Tractatus' (Ithaca, New York: Cornell University Press, 1964), p. 207.

Black does not see any further explanation of Wittgenstein's position, nor do I. Clearly if a proposition can be written or spoken, it is difficult to see how one can consider infinite strings of names or elementary propositions to be themselves propositions.

One issue that should be raised in connection with the analysis of general propositions is that of whether propositions containing quantifiers occur in PL. I know of no discussion in Tractatus literature on this point, and perhaps there is good reason for this in the obscurity of Wittgenstein's statements on the subject. The purpose of PL is to avoid ambiguity, to show the logical form of states of affairs in a perspicuous manner, and to offer an analysis of meaningful propositions belonging to other languages. Consider,

> In a proposition a thought can be expressed in such a way that elements of the propositional sign correspond to the objects of the thought. (3.2)
>
> I call such elements 'simple signs', and such a proposition 'completely analysed'. (3.201)
>
> The simple signs employed in propositions are called names. (3.202)

A quantifier would not occur in a completely analysed proposition, because it is not a name. And propositions which are capable of truth-functional analysis which are themselves not in truth-functional form are not completely analysed. Thus there are two very good reasons for concluding that such propositions do not occur in PL.

On the other hand, Wittgenstein rejects identity - the analysis of which I will consider in the next section - in the same passages that he seems to accept the use of quantifiers and variables:

> ...instead of '$(x):fx \supset x = a$' we write '$(\exists x).fx.\supset.fa:\sim(\exists x,y).fx.fy$'. (5.5321)

Here a convention concerning the use of variables and quantifiers is designed to circumvent the use of '=' in propositions. If it is assumed that the purpose of this replacement is to perspicuously state what would be asserted by propositions containing '=', it would follow that, since the replacements of these propositions contain quantifiers, PL does contain quantifiers.

I do not think quantifiers occur in PL. The problem posed by 5.5321 remains and I wish to suggest that perhaps Wittgenstein felt that quantifiers are legitimate in a way that the identity sign is not: that even in a non-perspicuous but meaningful language '=' does not occur but '$(\exists x)$' and '(x)' could occur. The alternative, of course, is that Wittgenstein himself was not certain of the answers to these questions. The suggestion I offer here demands, for its complete understanding, a discussion of propositions mentioning identity, and this will be our next topic.

III

The ontological claims of the Tractatus are paralleled by a doctrine of language which asserts that essential features of language reflect the world's structure and categories. The meaningfulness of thought and language is explained by the picture theory of meaning, and an important part of this theory is the doctrine that certain elements of thoughts or propositions have, as their meaning, those entities to which they refer. The picture theory includes the analysis of logical form as a feature of pictures, an analysis with which we are now familiar. However, the identification of meaning and reference has not played a large role in the investigations made in this thesis so far, with the exception of the discussion of simplicity. I will now consider

its application in Wittgenstein's critique of a particular linguistic item, the identity sign ('=').

The striking feature of Wittgenstein's treatment of identity is that '=' does not occur in PL.

> Identity of object I express by identity of sign and not by using a sign for identity. Difference of objects I express by difference of signs.
>
> (5.53)

There are three considerations which, given the Tractatus doctrine as whole, support this position. Two of them are offered explicitly by Wittgenstein but, as I shall demonstrate, they are not sufficient to warrant a rejection of the identity sign. The third consideration involves Wittgenstein's doctrines of what is possible and what can be an object of thought, and it legitimately rules out '=' from PL.

The first point is this: Wittgenstein rejects Russell's definition of '=' because it does not capture sameness. Russell adheres to the principle of the identity of indiscernables, which asserts that no two objects can have all their properties in common. Russell believes the identity of indiscernables implies that if any object x has all the predicates belonging to an object y, and y has all the predicates of x, then x is identical with y. Thus he offers the definition, $x=y=_{df}$ $(\emptyset)$ $(\emptyset)x\equiv\emptyset y)$. If the identity of indiscernables is to be used to define '=', it must be a necessary truth. For if it were contingent, it would not be a metaphysically or logically important notion which could be used to define identity. Wittgenstein holds that the identity of indiscernables is not necessarily true, and that, consequently, Russell's definition of '=' will not do.

> Russell's definition of '=' is inadequate, because according to it we cannot say that two objects have all

> their properties in common. (Even if this proposition is never correct, it still has sense.)
>
> (5.5302) (my italics)

The proposition Wittgenstein refers to could occur in PL for it is a proposition with sense. Call this proposition A. In a non-perspicuous language A might be expressed,

$(\exists x)\ (\exists y)\ (\emptyset)\ (\emptyset x \equiv \emptyset y) \cdot \sim(x=y)$

But according to Russell's theory A would be a contradiction; the conjunct $\sim(x = y)$ would be equivalent to $\sim(\emptyset)(\emptyset x \equiv \emptyset y)$. Clearly Wittgenstein believes that identity is not a necessary condition for two objects to have all their properties in common. Instead, he provides an account on which A is not contradictory, and using his convention that different signs refer to different objects, A becomes simply $(\exists x)(\exists y)(\emptyset)(\emptyset x \equiv \emptyset y)$. Wittgenstein's objection to Russell's definition of identity is that it is proposed as a necessary truth, yet its necessity is based neither on *a priori* linguistic considerations nor on truth-functional analyses of meaningful propositions.[4]

We need not go deeply into the problems associated with Russell's treatment of identity, or the question of whether or not two objects with all their properties in common should be considered as identical. What is important, however, is that one could introduce '=' into PL as a *primitive* sign instead of as one defined,[5] or it might even be possible

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[4] R. Muehlmann, "Russell and Wittgenstein on Identity", Philosophical Quarterly, vol. 19, no. 76 (July, 1969), pp. 221-230.

[5] For systems introducing '=' as a primitive, see J.B. Rosser, Logic for Mathematicians, (New York: McGraw-Hill, 1953) Chapter VII, and Hilbert and Ackermann, Mathematical Logic, (New York: Chelsea Publishing Co., 1950) p. 107. '=' can be satisfactorily introduced into a language with two axioms, one stating that two expressions connected by '=' can replace each other in any expressions in which they occur, and another stating that everything is identical with itself.

to find a new definition of '='. In other words, dissatisfaction with Russell's definition of '=' is not sufficient for exclusion of '=' from PL.

One might expect that Wittgenstein would wish to incorporate '=' in PL in order to express definite descriptions or to allow for a definition of numbers. Or he might find '=' useful simply to express the diversity of various objects, or to give the prerequisites for certain physical relationships; for instance, it might be significant to say that a can be between b and c only if a, b, and c are diverse. But Wittgenstein is not interested in expressing these things in PL using '=', if he even wishes to express them at all. In the formal expression of these statements, he says, there is the temptation to think of identity as something in the world. In his opinion '=' is a meta-linguistic sign, and while it does not occur in PL it is used to talk about individual constants or variables which do occur in PL.

> When I use two signs with one and the same meaning, I express this by putting the sign '=' between them.
> So 'a = b' means that the sign 'b' can be substituted for the sign 'a'.
> (If I use an equation to introduce a new sign 'b', laying down that it shall serve as a substitute for a sign 'a' that is already known, then, like Russell, I write the equation - definition - in the form 'a = b Def.' A definition is a rule dealing with signs.)
> (4.241)
>
> Expressions of the form 'a = b' are, therefore, mere representational devices. They state nothing about the meaning of the signs 'a' and 'b'.
> (4.242)

In introducing the material of this chapter, I spoke of Wittgenstein's concern with the language of logic. Here he admits that there is a use for '=', and this may well be in an acceptable logical notation. But in excluding '=' from PL, he offers arguments which also rule it out

from any language which would be, according to his doctrine of significance, meaningful. Thus any proposition which, in effect, asserts that two things are identical is illegitimate. An acceptable logical notation, on this interpretation, will contain statements having a metalinguistic content, and would be strictly speaking meaningless.

The meaning of a simple sign is that to which it refers. Wittgenstein does not wish to allow '=' in PL because in certain applications it might look as if it referred to a relation between objects:

> It is self-evident that identity is not a relation between objects. This becomes very clear if one considers, for example, the proposition '(x): fx.⊃.x = a'. What this proposition says is simply that only a satisfies the function f, and not that only things that have a certain relation to a satisfy the function f.
> (5.5301)

> Roughly speaking, to say of two things that they are identical is nonsense, and to say of one thing that it is identical with itself is to say nothing at all.
> (5.5303)

This fear that identity statements might be taken as relational constitutes a second motive for outlawing identity signs. Thus a proposition like '(x):fx.⊃.x = a' cannot appear in PL:

> And now we see that in a correct conceptual notation pseudo-propositions like 'a = a', 'a = b. b = c.⊃ a = c', '(x). x = x', '(∃x).x = a', etc. cannot even be written down.
> (5.534)

The question now is, if the identity sign did occur in PL, why would one have to construe it as referring to some relation in the world? The case might not be different from that of the connectives. The connectives occur in PL although Wittgenstein denies that they refer to relations, or anything else, in the world. This is permissible because they are given a meta-linguistic clarification, just as one is given of '=' in 4.241 and 4.242. Tautologies and contradictions, in turn, occur in PL although they "say nothing" - thus the statement that an object is

identical with itself cannot be ruled illegitimate (cf. 5.5303) merely on the grounds that it says nothing.

The second consideration, that the identity sign might appear to denote a relation, is thus not sufficient for the exclusion of this sign from PL. PL does contain non-referential terms, and thus this is not by itself a criterion for admitting or excluding terms from PL. Was Wittgenstein aware of the fact that his explicit reasons were not sufficient to exclude '=' from PL? Probably not, for the two considerations we have discussed so far as explicit in the Tractatus and the third is not. But the discussion which follows concerns the structure of the Tractatus as a whole, and it is in the examination of this structure that we shall see why Wittgenstein is so concerned to exclude '=' from PL.

Wittgenstein is motivated to exclude propositions of a certain sort from PL, that is, certain propositions which contain '='. 5.534 mentions some propositions excluded from PL; one of these is '$(\exists x).x = a$'. This is a proposition in the symbolism of Principia Mathematica, whose authors proposed that the English statement "a exists" be represented by it. In order to understand the special problems associated with this and other "existential" assertions, it is necessary to refer to Wittgenstein's analysis of possibility. This analysis is linked to the formula that the meaning of a name is that to which it refers. Consider these two groups of propositions:

I

> It is obvious that an imagined world, however different it may be from the real one, must have something - a form - in common with it. (2.022)

Objects are just what constitute this unalterable form. (2.023)

Objects are what is unalterable and subsistent; their configuration is what is changing and unstable. (2.0271)

II

A picture depicts reality by representing a possibility of existence and non-existence of states of affairs. (2.201)

In a picture the elements of the picture are the representatives of objects. (2.131)

A name means an object. The object is its meaning. (3.203)

A picture contains the possibility of the situation that it represents. (2.203)

A possible state of affairs, according to group II, is pictured by a true or false proposition, and every false proposition represents a possible although not actual state of affairs. In order to be meaningful, a false proposition must consist of names of existent objects for, according to 2.131 and 3.203, only if a name refers to an object can it be meaningful. Every meaningful proposition is true or false. Thus there can be no state of affairs, actual or possible, which consists of objects that do not exist, and even a false proposition must contain names for existent objects. We must conclude from this that even if certain future (or past) states of affairs are "possible" in a non-Tractarian sense (states of affairs containing objects which do not now exist) there is no way that we can talk about these states of affairs in meaningful language.

The relevance of the non-acceptability of "$(\exists x).x = a$" and statements of like form is this: if such a statement were significant, it would refer to a contingent state of affairs. (It is not a tautology.)

But it cannot do this, for if it is significant, "$\sim(\exists x).\ x = a$" is significant also. This would be to say that a does not exist. It is impossible that a name be meaningful if it does not refer to an existent, hence if a does not exist, 'a' cannot be meaningful. In other words, a must exist if it is named. Because PL must contain propositions which depict possible states of affairs, "$(\exists x).\ x = a$" cannot occur in it. As any legitimate proposition can be negated, "$\sim(\exists x).\ x = a$" does not occur in PL either. Similarly, "a = a" is nonsense. Wittgenstein says,

> Expressions like 'a = a', and those derived from them, are neither elementary propositions nor is there any other way in which they have sense. (this will become evident later.)
>
> (4.243)

We have, in the sections quoted above, the evidence for this claim.

Most philosophers believe that propositions of the form "$(\exists x).\ x = a$", "a = a", and their negations are significant. John Searle protests against the doctrine that the meaning of a name is the object to which it refers, that is, the doctrine which leads to the rejection of '=', on the grounds that the identification of meaning and reference makes Wittgenstein's objects necessary existents.

> If one agrees with the Wittgenstein of the Tractatus that the meaning of a proper name is literally the object for which it stands, then it seems that the existence of those objects which are named by genuine proper names cannot be an ordinary contingent fact. The reason for this is that such changes in the world as the destruction of some object cannot destroy the meaning of words, because any change in the world must still be describable in words. But this seems to be forcing us into the view that there is a class of objects in the world whose existence is somehow necessary, those objects which are the meanings of the real proper names. Indeed, it seems, if we accept this view, that it could not make any sense to assert or deny the existence of the objects

named by genuine proper names.[6] (my italics)

Consider Searle's claim, "such changes in the world as the destruction of some object cannot destroy the meaning of words." I believe Wittgenstein would not accept this position. If meaning is reference, we are presented with a dilemma. Of the following analyses, either (a) or (b) is true, but not both:

(a) Words cannot lose their meaning, thus objects cannot be destroyed or cease to exist.
(b) Words can lose their meaning. But such a possibility cannot be described in meaningful language.

I see no reason to accept (a) in favor of (b). When Searle claims that words do not lose their meaning, he must appeal to a notion of meaning, perhaps more common or popular than Wittgenstein's, which would distinguish meaning from reference. Searle's view, unlike Wittgenstein's, is that what are ordinarily taken to be proper names in ordinary language really are proper names. Thus he cannot take the identification of meaning and reference seriously.

The claim that a name necessarily refers to an existent object is distinct from the claim that the referent of a word is a necessary existent. Wittgenstein's doctrine may be stated thus: it is necessary that a word refer to an object which exists, or, if there is meaningfulness, then objects must exist. That Wittgenstein holds this view is shown by the passages of I and II above. This doctrine could be symbolized $\Box(W=O)$. But this is not to say that the object named is

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[6] John Searle, "Proper Names and Descriptions", Encyclopedia of Philosophy, Volume VI, ed. Paul Edwards (New York: The Macmillan Company, 1967), p. 488.

itself a necessary existent, as Searle believes. The necessary existence of objects is not implied, that is, the statement above cannot be expressed as W=□O.

Searle believes that the thesis that one cannot assert or deny the existence of objects is an undesirable consequence of the doctrine of significance, since that thesis, in identifying meaning and reference, appears to demand necessary existents. Searle believes, along with many others, that it makes sense to assert or deny certain objects exist through the use of names, and he correctly supposes that the existence of necessary existents would not be asserted in a contingent proposition. We have seen that Wittgenstein's affirmation of the view that one cannot assert or deny existence of objects is motivated by the doctrine of significance itself. However, Wittgenstein's objects are not necessary existents, nor has Searle shown that they must be. We can grant that the impossibility of denying or asserting the existence of objects is an undesirable consequence of the doctrine of significance, without the intervening claim that objects are necessary existents. Once a name has meaning in a given language, no contingent proposition (and certainly no tautology or contradiction) could assert that the object it stands for does not exist.

Not only are objects not necessary existents, they might even be momentary existents. Possibility has been analyzed in terms of the existence and non-existence of configurations of objects rather than the existence and non-existence of objects. Thus a world consists of a set of objects, all configured in one way or another. If this set of objects is replaced by another through the fact that an object ceases to exist, or because any number of objects in this set cease

to exist, a new world comes into being. Such a change or possibility cannot be described in meaningful language. The characterization of Wittgenstein's world in Group I as one composed of "unalterable and subsistent" objects suggests that objects exist eternally. But this conclusion is not inescapable. Objects may exist only momentarily, and temporal relations could be construed as relations among various worlds of objects that came into existence and then were replaced by others. The point here is not to argue that objects are momentary existents. But Wittgenstein leaves the issue undecided, and this provides all the more reason to avoid characterizing objects as necessary existents.

Given the doctrine of significance, it remains true that whether objects are momentary, exist for a finite time, or exist eternally, they still cannot be asserted to exist, nor can their existence be denied. Names cannot occur in language unless they refer to existents. Is it fair to point out that names in ordinary language often refer to non-existents? Caesar and Napoleon do not exist, yet 'Caesar' and 'Napoleon' are names. Of course, Wittgenstein would deny that, in his system, these words qualify as names, if for no other reason than that they do not refer to simple entities. If we are to be fair in criticizing the doctrine on which the program of a perspicuous language rests, it must be admitted that, in a Tractarian sense, no ordinary language terms are names.

The problem of identity is not an isolated philosophical problem. Wittgenstein's account shows that a theory of meaning and the ontological requirements of that theory are closely tied to the analysis one offers of identity. In arriving at his analysis, Wittgenstein assumes that meaning is reference. The more general issue is that of the

validity of this principle, and perhaps no argument is conclusive in deciding this.

In the last chapter I shall criticize some of the principles leading, as this discussion has illustrated, to the doctrines of possibility and expression of existence. One point which has become evident by now is that Wittgenstein does not consider the conventions of ordinary language or even Principia Mathematica as good philosophical guides; he thinks that in many cases they are suspect because they lead to a conflict with his idea of what constitutes representation in language. In developing his theory of language, Wittgenstein does not begin with a body of spoken or written propositions which describe the world, but with a set of requirements which would define such a language. We are expected to accept these requirements because they cohere with descriptions of Wittgenstein's world; in short, a world reducible to independent atomic facts and simple objects is described by a language reducible to a truth-functional array of propositions containing only simple names.

Chapter Five

Thought and Its Place in Wittgenstein's System

In this chapter I shall be concerned with Wittgenstein's characterization of thought and the relation of thought to language and the world. I will attempt to elucidate two doctrines: that (A) thought and language share certain logical features and are subject to the same requirements for meaningfulness, and that (B) thought is in some special way responsible for the existence of language. After demonstrating that Wittgenstein holds these principles, I will discuss Wittgenstein's reasons for believing in them. In doing this I will attempt to discredit the view that the Tractatus presents a kind of "linguistic behaviorism" - the view that a thought is nothing more than the proposition which is said to express it. If this interpretation were correct, (A) would be trivially true and (B) would be nonsense, but I shall show that Wittgenstein takes them to be of crucial importance and, furthermore, explicitly distinguishes between thought and language. I will follow this discussion with an evaluation of a third interpretation of Wittgenstein's view on thought and language, one distinct from that identifying thought and language and from my own. I will then turn to Wittgenstein's solutions of some traditional problems in the philosophy of mind.

I

Neither (A) nor (B) is explicitly asserted in the Tractatus. The first suggestion of (A) is found in its preface.

> Thus the aim of the book is to set a limit to thought, or rather - not to thought, but to the expression of thoughts; for in order to be able to set a limit to thought, we should have to find both sides of the limit thinkable (i.e. we should

have to be able to think what cannot be thought.)
It will therefore only be in language that the limit can be set, and what lies on the other side of the limit will simply be nonsense.[1]

In this passage Wittgenstein tells us that language provides a basis for knowledge of the nature and limit of thought. One cannot find limits to thought in thought itself; one must turn to language, for this does not involve thinking the unthinkable. One can say that a certain form of words is nonsense, but one cannot say that "that so and so might be the case is unthinkable", for this would involve thinking that so and so might be the case. Wittgenstein's principle that the limits of thought are set in the limits of language is then one motive behind his formulation of rules which determine what is meaningful in language and what is not. In applying these rules, we find that certain forms of words which seem to express thoughts cannot actually do so, and thus lie beyond the limit. The question to be asked is, why is there this correspondence between thought and language? The answer will be found in (B). The principle that propositions express thoughts.

Wittgenstein ends his discussion of the ontological features of the world with 2.063. In introducing the next subject, the nature of language, he speaks of the features and analysis of <u>pictures</u>. As discussed in chapter one, the significance of this is that 'picture' refers to a genus of which thoughts and propositions, as well as what one conventionally thinks of as picture, are species.

A logical picture of facts is a thought. (3)

A proposition is a picture of reality. (4.01)

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[1]Wittgenstein, <u>Tractatus</u>, p. 3.

Both thoughts and propositions are pictures, and it is not surprising to find Wittgenstein saying that all pictures have the features of logical form and correlation of elements which we found to be attributed to propositions in our analysis of the latter. According to (A), features of thoughts qua pictures are revealed through examination of the essential features of other pictures and, in particular, propositions. (A) then rests on the view that both thoughts and propositions are pictures, and only to the extent that thoughts and propositions are pictures is (A) true. Features of thoughts not common to all pictures cannot be discovered through a critique of language.

What features of thoughts and other pictures are considered to be essential? Like propositions, thoughts share a logical form with the situation they describe, and that situation must be possible.

> A picture has logico-pictorial form in common with what it depicts. (2.2)
>
> A picture contains the possibility of what it represents. (2.203)

A picture shows that what it depicts is possible. 2.203, which makes this point, is dependent upon 2.2. In sharing a logical form with its referent a picture shows that it refers to a certain logically possible state of affairs. Thus Wittgenstein's claim that

> A thought contains the possibility of the situation of which it is the thought. What is thinkable is possible too. (3.02)

tells us not only that thoughts must refer to possible states of affairs, but it indicates that thoughts, being pictures, share a logical form with the states of affairs to which they refer.

A thought is like a proposition in other respects as well.

Wittgenstein says,

> Thought can never be of anything illogical, since, if it were, we should have to think illogically.
> (3.03)
>
> It is as impossible to represent in language anything that 'contradicts logic' as it is in geometry to represent by its coordinates a figure that contradicts the laws of space, or to give the coordinates of a point that does not exist.
> (3.032)

A thought is in a sense "well-formed" like a meaningful proposition. The meaning of both a proposition and a thought is a possible state of affairs. A further common feature of thoughts and propositions is that neither can be known a priori except those that are such that they, or their expressions, are tautologies. In thought, as in language, the only necessity is that of logical necessity.

At some points in the Tractatus it appears that thoughts are identified with propositions. If this were the case, the basis for Wittgenstein's claim that the limits of language coincide with the limits of thought would be simply that language and thought are the same thing. 5.542 has engendered the most controversy over the status of thought in Wittgenstein's system.

> It is clear, however, that 'A believes that p', 'A has the thought p' and 'A says p' are of the form '"p" says p': and this does not involve a correlation of a fact with an object, but rather a correlation of facts by means of the correlation of their objects.
> (5.542)

As I see it, the question of interpretation centers on Wittgenstein's phrase, 'are of the form'. Here he implies, at the very least, that thoughts are complexes of elements, just as propositions are. Each of the elements making up a thought designates some "object" in a state of affairs. But are we to take this to mean that propositions

(represented by '"p"' to the left of 'says' in 5.542) and thoughts are literally the same, or are we to conclude that Wittgenstein is here only pointing out similarities between two different kinds of items? Wittgenstein does not explicitly identify thought and language. He does say,

> A propositional sign, applied and thought out, is a thought. (3.5)
>
> A thought is a proposition with a sense. (4)

These passages are ambiguous, and neither assert nor deny that thoughts and propositions are the same. My view is that 3.5 and 4, like 5.542, connect thoughts with propositions in a special way. But the exact nature of this connection is not clear in these passages.

If we were to construe thoughts as propositions, we would have to say that an element of a propositional sign is an element of a thought-picture. That is, because all pictures are facts, elements of those facts which are employed as propositional signs would be elements of thoughts, or of "thought signs". But there is a difference between elements of thoughts and elements of propositions, and for this reason I conclude thoughts and propositions must be distinct.

In an exchange of letters between Russell and Wittgenstein in 1919, Russell asked if thoughts consisted of words. (Wittgenstein completed the Tractatus earlier that year and sent the manuscript to Russell. Wittgenstein's correspondence is published, in part, in the appendix of Notebooks.) Wittgenstein replied, "'Does a Gedanke consist of words?' No! But of psychical constituents that have the same sort of relation to reality as words."[2] But then psychical entities, while they might

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[2]Wittgenstein, Notebooks, p. 130.

appear to be good candidates for elements of propositional signs, make up a different kind of picture. For Wittgenstein says that propositional signs are made up of words:

> What constitutes a propositional sign is that in it its elements (the words) stand in a determinate relation to one another.
>
> (3.14)

If the 1919 letter is to be consistent with this passage, thoughts cannot be propositions.

5.542 must not, then, be taken as identifying thought and language. A word is a physical entity. On the other hand, a thought consists of projected psychical entities making up a fact which is distinctly psychical or mental. Now the distinction between propositions and thoughts might be taken as consisting only in the contrast between physical and mental signs, both projected to the world in seemingly unaccounted for but similar manners. Wittgenstein says in the same letter to Russell,

> I don't know what the constituents of a thought are but I know that it must have much constituents which correspond to the words of language.[3]

If the contrast were just this, one could speak of mental propositions, that is, those collections of psychical entities which function in the same way that propositional signs function when propositions are spoken or written. However, this is not the only difference between thoughts and propositions.

> In a proposition a thought finds an expression that can be perceived by the senses.
>
> (3.1)
>
> I call that sign with which we express a thought a propositional sign. -And a proposition is a propositional sign in its projective relation to the world.
>
> (3.12)

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[3]Wittgenstein, Notebooks, p. 130.

Thoughts are expressed in propositions. In this declaration Wittgenstein is attempting to explain how it is that physical signs become meaningful. This point would be lost if thoughts themselves were construed as a kind of proposition. Propositions are dependent upon thoughts, and this dependence consists in the fact that the meaning relation holding between word and object is somehow produced or contributed by thought. This is principle (B) - the principle that thought is responsible for the existence of language and accounts for the meaningfulness of language.

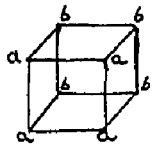
> We use the perceptible sign of a proposition (spoken or written, etc.) as a projection of a possible situation.
> The method of projection is to think of the sense of the proposition.
>
> (3.11)

In these passages thought is given a central role in Wittgenstein's theory. Thoughts give meaning to propositions, and the latter have meaning because they express thoughts. The sharing of pictorial features by thoughts and propositions is explained by the fact that we find it necessary to employ physical representations of that which we perceive, remember, or imagine. And if propositions are to have a minimum of coherence, they, like thoughts, must be pictures - likenesses of the states of affairs of which we think.

> A proposition is a picture of reality.
> A proposition is a model of reality as we imagine it.
>
> (4.01)

Pictures, of which both thoughts and propositions are instances, share a form with states of affairs depicted by them. A proposition is usually an artifact (emphasis on the last syllable); because a fact has a form, we can isolate it, if not create it, and use it as a propositional sign. Because we use facts to depict possible facts, logical

form shows itself. Of course, there are gross dissimilarities between ctures and what they represent. But the linguistic relation of a proposition is one of many relations exhibited by the propositional sign of that proposition. In order that it single out a state of affairs, a picture is defined in terms of one of the many ways in which its constituents are organized.

> To perceive a complex means to perceive that its constituents are related to one another in such and such a way.
>
> This no doubt also explains why there are two possible ways of seeing the figure
>
> 
>
>
> as a cube; and all similar phenomena. For we really see two different facts.
>
> (If I look in the first place at the corners marked a and only glance at the b's, then the a's appear to be in front, and vice versa).
>
> (5.5423)

In the relationship of elements on which we focus (a relationship fixed by formation rules) we are shown the form of the state of affairs represented as well as the form of numerous other possible states of affairs. A proposition presents an instance of a whole set of possibilities, which enables it to be used in representing any one of those possibilities.

Some commentators have held that thoughts consist of physical signs projected to the world and that thoughts and propositions are identical. To see how this view may have come about, consider Ramsey's claim that, in 5.542, Wittgenstein

> explicitly reduces the questions as to the analysis of judgment...to the question, "What

> is it for a proposition token to have a certain sense?"[4]

If the only problem in understanding the nature of thought is that of articulating the requirements for meaningfulness of propositional tokens, then the only thing we can know about thought is given by the picture theory. Earlier in this discussion I observed that setting the "limits to thought" in the "limits of language" means extending our understanding of the pictorial character of propositions to thought. Ramsey's statement is correct if his aim is to tell us that features of thoughts common to all pictures can be understood through an accounting of those features of propositional tokens which accounts for their pictorial character. But, as I have argued, there is more to say about thought than what is given by principle (A).

J.O. Urmson and E.B. Allaire hold that a thought is a proposition. Urmson states that 5.542

> appears to assimilate belief to the uttering of a sentence, so that Jones's belief is the set of words he utters and Jones believes that p' can therefore be said to be of the form "'p' says p".[5]

This claim depends on taking 5.542's phrase "are of the form" for more than it is worth. Urmson is not alone in this. From the same passage, Allaire concludes,

> Mind...in the ontological sense is no more and no less than a physical mark plus the "ineffable" say relation, or more narrowly, the relation between a word and its referent.[6]

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[4]F.P. Ramsey, "Review of Tractatus", in Essays, p. 13.

[5]J.O. Urmson, Philosophical Analysis (Oxford: The Clarendon Press, 1956), p. 133.

[6]E.B. Allaire, "A Critical Examination of Wittgenstein's Tractatus" (Ph.D. dissertation, University of Iowa, 1960), p. 199.

One of the reasons this interpretation is advanced by these commentators is that they are interested in exposing the historical development of a certain view which does identify thought and language. For (A) is of prime importance in the Tractatus, and it has suggested to later philosophers an identification of thought and language. But (A) does not imply this identification and this is not the early Wittgenstein's view. While the 1919 letter itself repudiates the Urmson-Allaire view, there are further problems with their position.

If thought and language are identified, the assertion that language is the expression of thought becomes empty and insignificant. Yet it is significant; it is an attempt to explain how linguistic symbols become meaningful. Compare this Tractatus claim with the following passages from the Bluebooks and the Philosophical Investigations:

> In a proposition a thought can be expressed in such a way that elements of the propositional sign correspond to the objects of the thought.
>
> (3.2)

> It seems that there are certain definite mental processes bound up with the working of language, processes through which alone language can function. I mean the processes of understanding and meaning. The signs of our language seem dead without these mental processes...if you are asked what is the relation between a name and the thing it names, you will be inclined to answer that the relation is a psychological one...[7]

> Point to a piece of paper. -And now point to its shape - now its colour - now to its number (that sounds queer). -How did you do it? -You will say that you 'meant' a different thing each time you pointed. And if I ask how that is done, you will say you concentrated your attention on the colour, the shape, etc. But I ask again, how is that done?[8]

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[7]Wittgenstein, The Blue and Brown Books (Oxford: Basil Blackwell, 1958), p. 3.

[8]Wittgenstein, Philosophical Investigations, second edition (New York: The MacMillan Co., 1958), section 33. p. 16.

> What is the relation between name and thing named? ...This relation may also consist, among many other things, in the fact that hearing the name calls before our mind the picture of what is named...[9]

In modifying his views in later life, Wittgenstein came to believe that the Tractatus model of meaning was, at best, true of only a small portion of language and thought. It is interesting that in #33 Wittgenstein also questions the acceptability of (B) as an answer to the question of how language becomes meaningful, suggesting that (B) itself stands in need of a justification as much as does (A). The fact that the later Wittgenstein criticizes the Tractatus doctrine of picturing and naming and, in the same contexts, the view that the analysis of thought is similar to that of physical pictures strongly suggests that Wittgenstein believed at one time that thoughts are mental pictures. It is in fact surprising that one might think that the Tractatus does not distinguish between thought and language. At the time the Tractatus was written, such a view would have called for a lengthy defense rather than an obscure suggestion.

Wittgenstein asserts (A) in the Notebooks, making it clear, at the same time, that thought and language are distinct.

> Now it is becoming clear why I thought that thinking and language were the same. For thinking is a kind of language. For a thought too is, of course, a logical picture of the proposition, and therefore it just is a kind of proposition.[10]

This passage is at variance with what I have stated above in one respect. For in saying that a thought is a kind of proposition, Wittgenstein

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[9]Wittgenstein, Philosophical Investigations, section 37, p. 18.

[10]Wittgenstein, Notebooks, p. 82.

implies that constituents of thoughts are a kind of word. As Wittgenstein's 1919 letter explains, psychical constituents of thoughts are not words. But the important point, a point shared by the Wittgenstein of the Tractatus with the author of the Notebooks, is that constituents of written or spoken language are different from constituents of thought. The Notebooks passage expresses, on my view, an early step in Wittgenstein's expanding theory of the role of thought in giving meaning to language. The Tractatus goes beyond the Notebooks in stating that propositions are meaningful because we "think the sense" of propositions. But this view has been questioned, at least with respect to its completeness. Language, like thought, has many facets and roles, and the later Wittgenstein, who became puzzled by languages which the "picture theory" failed to render intelligible, attempted a new understanding of language and thought.

II

I turn now to the problem of expressing, in meaningful language (PL or language which can be analyzed in terms of PL), the fact that a thought or proposition has a certain reference. In chapter one it was observed that Wittgenstein is committed to a truth-functional analysis of language; he claims that meaningful propositions must be elementary propositions, logical combinations of them, or analyzable into such logical combinations. The occurrence of a certain thought might be described in ordinary language with a statement of the form "A thinks p". 5.542 says that the proper form of this expression is that of '"p" says p'. Does this mean that '"p" says p" (hereafter S) is the analysis of "A thinks p" and that it could occur in PL?

It has become a commonplace observation in present day philosophy that statements of a person's cognizant states or "propositional attitudes" are not elementary propositions (that is, they contain one or more sub-propositions) nor are they truth-functional combinations of elementary propositions. Thus "A thinks p", "A believes that p", and so forth are not truth-functional. Wittgenstein does not explain how S could be truth-functional. As I see it, S is like "A thinks p" insofar as neither is truth-functional. In a statement which is truth-functional, elementary sentences may be replaced by others of like truth-value without altering the truth-value of the whole. This is not always the case in S; with the proper choice of propositions to replace "p" (to the right of 'says') which have the same truth-value as it, one can produce a sentence of a different truth-value from that of S.

One answer to this problem is to require that 'p' be replaced in each case that it occurs - on both sides of 'says' in S. If this is done, one may argue, the truth-value of S will not change when substitutions are made for "p". But this is to say that if S is true it is necessarily true. In S, a propositional sign is used both to refer to the world and, where the convention of quotation marks placed around it is employed, to itself. S is not, on this interpretation, like propositions using 'says' or similar terms to translate propositions of one language to those of another. Such propositions are contingent. But if S is not contingent, and is not necessary (or impossible) in virtue of truth-functional analysis, it cannot occur in PL.

In spite of these problems, G.E.M. Anscombe claims that S is a "genuine" proposition, meaning that S is meaningful, according to the Tractatus requirements for meaningfulness. Anscombe bases her

characterization upon a novel interpretation of 5.542:

> ...we are given '"p" says p' as a possible form of proposition. If Wittgenstein has not been careless, it must fit his general account of propositions - that is, it must have true-false poles. Now if a sentence is an arrangement of words, it would seem to follow in accordance with the general principles of the Tractatus (or be defined by) a description of its arrangement of words; though it is a reasonable complaint for a reader to make that Wittgenstein might have been more explicit than he is on this important point...the expression schematically represented by '"p"', which in a concrete case would consist of an actual proposition in question marks, is to be taken as a way of describing the arrangement of signs that constitutes the proposition...the proposition '"p" says that p' is a genuine proposition, with true-false poles, according to the conceptions of the Tractatus: for its truth or falsity depends on how the sign 'p' is to be understood to be described.[11]

Anscombe believes that '"p"' in S represents a propositional sign - "the arrangement of signs that constitutes the proposition". Her view is that there are mental, as well as physical signs: "...in '"p" says p' what is being considered is the propositional sign, mental or physical."[12] One can be mistaken about how a propositional sign refers, or what state of affairs it stands for. Using "p" as a name of a propositional sign, we could say that "p" represents the state of affairs p in a given language but that, when "p" occurs in a certain other language it represents the state of affairs q. In some cases, then, S or statements like it can be false. In an analogous way, if we could describe the arrangement of elements in a psychical fact, we could be mistaken about which states of affairs it depicts.

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[11] G.E.M. Anscombe, Introduction, pp. 88-90.

[12] Ibid., p. 90.

Anscombe's view is enhanced by its ability to give a sense to the two passages preceding 5.542.

> In the general propositional form propositions occur in other propositions only as bases of truth-operations. (5.54)
>
> At first sight it looks as if it were also possible for one proposition to occur in another in a different way.
> Particularly with certain forms of proposition in psychology, such as 'A believes that p is the case' and 'A has the thought p', etc.
> For if these are considered superficially, it looks as if the proposition p stood in some kind of relation to an object A.
> (And in modern theory of knowledge (Russell, Moore, etc.) these propositions have actually been construed in this way.) (5.541)

Wittgenstein says that it may "at first sight" look as if there was a kind of meaningful proposition which contains a proposition within it (which implies that this proposition would not be elementary) but is not truth-functional. Wittgenstein then says, in 5.542, that these propositions <u>are of the form</u> '"p" says p'. Anscombe takes this chain of reasoning to imply that if we wish to meaningfully express the reference of linguistic symbols, or of thoughts, we must do so in meaningful form, the form prescribed by 5.542. A contrary conclusion, for which I will argue, is that no meaningful description of the reference of thought is possible, and that one of Wittgenstein's motives in 5.542 is to explain why this is so.

This issue can be decided if we can establish whether <u>S</u> is truth-functional. To show that a statement can be either true or false is not enough to show that it is a "genuine" proposition, for, according to 5.54, a genuine proposition must be truth-functional. Without trying to decide whether <u>S</u> is truth-functional (neither Anscombe nor Wittgenstein

show how it would be), an equally critical means of deciding whether S is a meaningful proposition (and of deciding the more important question of what 5.542 is saying) is to understand the content of the subpropositions, if any, that would occur in S.

Suppose S describes a connection, or connections, between a propositional sign and a fact. If S were false, it would be in a case where a mistake was made about the conventions governing the use of "p". And if S is true, it is because it expresses, or follows from, a rule governing the use of "p".

Is a grammatical connection between a propositional sign and state of affairs, or analogously, between a thought-complex and a state of affairs, expressible in PL? If S is meaningful, it describes a correlation of facts "by means of the correlation of their objects" (5.542 again). An actual instance of S then might relate the objects in a fact to names in a proposition. (It would also have to correlate, in some way, linguistic properties or relations with corresponding features of facts) S, if expressible, would consist of a conjunction of propositions relating names and objects. Each of these propositions would tell us the meaning of a name. But it is doubtful whether this information can be meaningfully expressed. After explaining that the meaning of complex signs can be given by definitions containing simples (names), Wittgenstein says,

> The meanings of primitive signs can be explained by means of elucidations. Elucidations are propositions that contain the primitive signs. So they can only be understood if the meanings of those signs are already known.
>
> (3.263)

A state of affairs describable in PL must consist in the qualification

of, or a relation among, simples. While space, time, and color are describable properties of things, grammatical relationships are not.

> The totality of true propositions is the whole of natural science (or the whole corpus of the natural sciences).
>
> (4.11)

We could call S a philosophical proposition. It is not a proposition representing the form of innumerable propositions connecting words and psychical entities with objects but has a function, peculiar to the context of 5.542, of telling us about the nature of thought.

> Philosophy is not one of the natural sciences.
> (The word 'philosophy' must mean something whose place is above or below the natural sciences, not beside them.)
>
> (4.111)
>
> Philosophy aims at the logical clarification of thoughts.
> Philosophy is not a body of doctrine but an activity.
> A philosophical work consists essentially of elucidations.
> Philosophy does not result in 'philosophical propositions', but rather in the clarification of propositions.
> Without philosophy thoughts are, as it were, cloudy and indistinct: its task is to make them clear and to give them sharp boundaries.
>
> (4.112)

As it is a philosophical proposition, S is meaningless. Wittgenstein's purpose in giving S as the proper form of statements describing thought is not to introduce S into PL as a truth-functional proposition. His purpose is to show that statements describing thoughts describe a correlation of facts. S is not meaningful but another example of a proposition which must be discarded as nonsense after it is understood.

> My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them - as steps - to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)
> He must transcend these propositions, and then he will see the world aright.
>
> (6.54)

How is it that a psychical entity comes to stand in the special relation it has with an object in the world? If this relation is the same as that between words and reality, as claimed in the 1919 letter (and as implied by 2.1514), is it essential or intrinsic to psychical entities to have this relation to reality? The latter question is suggested by the fact that a word, insofar as it is itself a fact or object, need not be connected in the naming relation to some other object. A psychical entity, on the other hand, does not refer because it is used to express something else, as do words. Thus it seems that it is essential to psychical entities to refer to objects.

This is by no means a conclusive argument showing that psychical entities must be essentially connected to objects in the naming relation. That it is not essential that any physical fact or object name, and that the relation between a word and reality is the same as that between psychical entities and reality, suggests the opposite conclusion that this relation between psychical entities and reality is accidental or extrinsic to psychical entities. If it were extrinsic to them, however, one might expect that there would be some other entity, a subject or ego, responsible for the reference of psychical entities. Wittgenstein rejects this notion:

> There is no such thing as the subject that thinks or entertains ideas.
>
> (5.631)

The notion of a simple mental substance or ego is rejected in favor of the doctrine of the composite psychical fact in 5.542. The doctrine of individual psychical elements all of which are projected or related to reality replaces the view that thought consists of simple subjects related to the world. We are always tempted to think that there are

such simple egos or substances, and Wittgenstein is aware of this. He explains that the simple subject is posited as a "limit of the world" which "does not belong to the world" (5.632). I take this to mean that a particular point of view in experience of the world leads to the idea of a simple subject. It is even fair to say that this point of view is the "self" (5.64). But because this entity is not in the world, there is no subject which actively correlates psychical entity with object in the peculiar relation or connection that must hold between a psychical entity and its object.

Without a comprehending subject or ego it is doubtful that the intentional relation is extrinsic to psychical elements of thoughts. Wittgenstein does not commit himself on this point. But it would seem that thoughts, which are analyzed as projected psychical facts, intrinsically refer to something other than themselves. Psychical entities, constituting thoughts, give meaningfulness to words, and it is an instrinsic feature of a psychical entity to refer because it, rather than a simple subject or ego, accounts for the reference of both thought and language. In the first section of this chapter I pointed out that Wittgenstein believes that thoughts are pictures. These pictures are not presented to some other entity in memory, perception, or other mode of thought, as in many traditional theories where thoughts are said to be presented to a mental substance, ego, or subject.

Recall that we began this section by questioning whether one could describe, in meaningful language, the reference of thought and language. When Wittgenstein mentions this referential nature of thought in 5.542, he does not recommend a form into which particular descriptions are to be cast, but outlines certain parallels between propositions and

thoughts. The relationship between constituents of thoughts and components of facts is the same as that between names (or, perhaps, all subject terms) and components of facts. But there is one difference. While no physical sign inherently names or refers, constituents of thoughts are intrinsically referential. This is to say that thought is intentional in nature.

In the special connection between psychical constituents of thoughts and objects in the world, Wittgenstein provides a ground for the intentionality of thought. The fact that a thought refers to a particular state of affairs is accounted for by the relation between its constituents and objects in that state of affairs. Wittgenstein thus provides a basis for distinguishing between what can be thought or spoken of and what cannot be thought or is nonsense. Intentionality of thought exists only where psychical entities are correlated with objects. It does often seem to us that thoughts have an aesthetic, religious, or philosophical content. In the language of Wittgenstein's Tractatus (we could call it, in the metaphor of 6.54, the "ladder language") this means that it does seem that there are thoughts which do not refer to entities in any possible world. Sections 1 through 2.063, in giving Wittgenstein's ontology, make it clear that a possible world is one consisting of, and only of, states of affairs made up of objects. These things are the only things which are thinkable. In contrast, there seem to be unthinkable subject matters.

> And so it is impossible for there to be propositions of ethics.
> Propositions can express nothing that is higher.
> (6.42)
> It is clear that ethics cannot be put into words.
> Ethics is transcendental.
> (Ethics and aesthetics are one and the same.)
> (6.421)

> How things are in the world is a matter of complete indifference for what is higher. God does not reveal himself in the world.
>
> (6.432)

Wittgenstein makes similar claims on the immortality of the soul, causation, and other like items. Recall that Wittgenstein says in the preface of the Tractatus that the limit to what is thinkable is "set" in language. The limit of language is set where it is because language expresses thought (principle B). And thought has sense only where its elements stand in the intentional relation, a relation not describable in meaningful language, with constituents of states of affairs.

III

Wittgenstein was aware of traditional questions in the philosophy of mind and presents answers to these questions. His system provides an analysis of the thinking subject or ego, and it provides an account of the intentionality of thought. In some respects Wittgenstein's view is like both traditional "representationalist" and empiricist philosophies of mind. As classically presented, representationalism consists in the correlation of idea with property of object perceived, remembered, or otherwise thought of. The fact that a thought refers to a given state of affairs is accounted for by the resemblance between idea, as a property of the mind, and the property of the object or state of affairs found in the world. Some representationalists adhered to a distinction between primary and secondary qualities and said that only primary qualities were represented through resemblance of idea and quality, but the analysis of the referential feature of thought was not substantially changed by this qualification.

Wittgenstein believes that a thought, as a picture, represents in virtue of a resemblance between thought and state of affairs. All pictures must be like the state of affairs to which they refer. Compare Locke's statement that

> The ideas of primary qualities of bodies are resemblances of them, and their patterns do really exist in the bodies themselves.[13]

with Wittgenstein's characterization of pictures:

> It is obvious that a proposition of the form 'aRb' strikes us as a picture. In this case the sign is obviously a likeness of what is signified. (4.012)

5.542, as we have seen, also requires that thoughts be like their referents. The notion that resemblance, or likeness, is a necessary requirement for representation is common to the representationalist doctrine and the Tractarian view. But Wittgenstein thinks of resemblance in terms of a "logico-pictorial" form, rather than a common content, of thought and that which is depicted by thought. Thus certain objections raised to the representationalist doctrine, such as the problem of how one is to "break outside" his ideas to an external world, are not a problem for Wittgenstein. A mental picture is not presented to the mind in perception or other mode of thought; the mental picture is itself the thought. Objects of knowledge are not "mediated" by mental pictures.

The reason that the representationalists and the empiricists believe that ideas can only represent something like them is found in their concern with the production of ideas. Consider the treatment of perception in the representationalist account. An idea which represents a physical

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[13]John Locke, An Essay Concerning Human Understanding (New York: Dover Publications, Inc., 1959), Book II, Chapter VIII, p. 173.

thing resembles that thing because it is produced by it. Locke says,

> These I call original or primary qualities of body, which I think we may observe to produce simple ideas in us, viz. solidity, extension, figure, motion or rest, and number.[14]

Even in Hume's philosophy the production of ideas of memory and imagination is accounted for by perceptions (impressions) which resemble those ideas. He says,

> We have no idea of any quality in an object, which does not agree to, and may not represent a quality in an impression, and that because all our ideas are derived from our impressions.[15]

Wittgenstein is not concerned with the origins of our ideas or thoughts. He never discusses the causal theory of perception, the influence it has had on modern philosophy, or the sorts of problems it appears to create. As I see it, it is because of the strong force of tradition that he believes that thoughts have a resemblance to their referents. This resemblance, Wittgenstein holds, is required to make the reference of thought to states of affairs intelligible. One may argue that resemblance is not necessary for the intentionality of thought, and that the reference of thought is not made more intelligible by this doctrine any more than the production of ideas can be explained through resemblance. This is to say that the picture theory fails as a comprehensive account of thought and language, as Wittgenstein himself argues in the Investigations.

Wittgenstein's view is close to those of certain medieval thinkers as well as those mentioned above. The Scholastic theory of mind

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[14]Locke, p. 170.

[15]David Hume, A Treatise of Human Nature (Oxford: Clarendon Press, 1960), Book I, Part IV, p. 243.

accounts for the referential aspect of thought in the following way: a form (conceived of as a property, universal, or "essence") is exemplified by the object perceived. The "act" of thought which refers to this object exemplifies this same form, but a different sort of exemplification or connection to the mind is involved than that of "material" inherence, so that one cannot predicate the form of the act of thought. Aquinas says,

> ...the material things known must needs exist in the knower, not materially, but rather immaterially.[16]
>
> That by which the sight sees is the likeness of the visible thing; and the likeness of the thing understood, that is, the intelligible species, is the form by which the intellect understands.[17]

Wittgenstein's view is again similar; we have seen that a logical form is exemplified by both a thought and the state of affairs to which it refers, and that this grounds the reference of thought to states of affairs. There is at least one difference between his view and that of the Scholastics. In contrast with the Scholastic view, there is only one kind of exemplification of logical form in Wittgenstein's theory. The same logical form is in both a thought and that to which it refers, and no distinction is made between being in a fact "materially" or "immaterially."

The medieval view generated the problem of individuation. If a thought refers to an object in virtue of exemplifying a property which is exemplified by that object, what is to account for the fact that it

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[16]Thomas Aquinas, Summa Theologica, in Introduction to Saint Thomas Aquinas, ed. Pegis (New York: Modern Library, 1965), p. 382.

[17]Ibid., p. 407

refers to that single object and not to all others exemplifying the same property? It is not necessary to go into the various solutions proposed to the problem of individuation. Wittgenstein provides one answer: thoughts having a certain logical form refer to one state of affairs, rather than to others like it, in virtue of the naming relation between psychical constituents and particular objects making up that state of affairs. This is a solution which the Scholastics could not use, for they did not analyze thoughts as complexes of elements.

What is of special interest is that both Wittgenstein and the philosophers of the medieval and modern periods think that something must be common to both thought and the objects of thought. We find that there is a recurring principle that knower and known, perceiver and perceived share some property, character, or form. And thus Wittgenstein stands at the end of a tradition as well as at the beginning of one.

The notable difference between Wittgenstein's theory and others is that the referent of a thought is a state of affairs rather than an object. Thus the form common to thought and its referent is the form of objects in combination, that is, the form of a fact.

Conclusion

Wittgenstein's theory of mind is designed, in part, to solve classical problems in the pholosophy of mind. However, his principles (A) and (B) do not figure directly in meeting these traditional issues. They are concerned with language and its relations to thought and that to which thought refers. Pointing toward new problems, they explain the fact that the Tractatus is a turning point in the history of philosophy. New methods and an interest in the role of language characteristic

of twentieth century philosophy began from the issues raised in consideration of these principles. Application of principle (A) provides a theory or analysis of mind which contains solutions to the problem of intentionality and the analysis of the thinking subject or ego. The theory of mind Wittgenstein presents is similar in certain respects to certain traditional theories, but the defense Wittgenstein offers for this theory incorporates novel methods and ideas, in which the role of the constituents and form of thought is crucial.

Wittgenstein arrives at a consistent scheme which meets the test of providing coherent answers to classical philosophical problems. I believe that criticism of Wittgenstein's theory of thought can only be successful if it concerns his principles or postulates rather than his conclusions concerning the nature of thought. The claim that thoughts are like propositions insofar as both are pictures, as well as (A) and (B), are popular subjects of criticism. It will be necessary, for the purpose of the discussions which follow, to bear in mind the isomorphism between thought and language embodied in (A) and (B). These principles are the backbone of Wittgenstein's claim that he has set a limit to thought and that he has offered a full and correct analysis of pictures - that is, propositions and thoughts.

The purpose of this chapter has been to elucidate the connection between thought and two kinds of items: propositions and states of affairs. Throughout this discussion, a recurring item has been Wittgenstein's notion that he has set a limit to thought in language. In the preface to the Tractatus he suggests that the major problem of philosophy is that of determining that which we can intelligibly question or that to which we can expect to find an intelligible analysis or account.

Wittgenstein's solution to this problem is his theory of picturing. Propositions and thoughts are pictures, the latter finding expression in the former. What cannot be expressed in language cannot be thought. But if we really know that this theory is correct, our understanding exceeds our ability to think.

Chapter Six

The Role of PL

Thus far we have found that Wittgenstein is concerned with all meaningful language and not just a special and artificial one. In claiming, in my introduction, that Wittgenstein is not interested primarily in PL when he characterizes language I tried to focus attention on Wittgenstein's interest in actual, everyday representations of facts. This interest is motivated, I claimed, by a desire to give a comprehensive theory of language and the world, one which finds support in its overall coherence.

Common to PL and ordinary language we found requirements of shared logical form, subject-predicate connections (where the predicate of a proposition is a linguistic relation or property), reference to logically possible configurations of objects, and truth-functionality. Unique to PL is the absence of predicate expressions and all other terms than names and logical connectives. Names refer to simple objects, and these objects, as the meanings of names, exist. But what is it to know the general nature of perspicuous propositions? What philosophical knowledge is offered by Wittgenstein's discussion of PL?

In the introduction I claimed that Wittgenstein does not use PL in the derivation of an ontological position, but argued that PL plays a critical role in the presentation of Wittgenstein's views on language. In this chapter I shall consider three aspects of this presentation. The first concerns the content of perspicuous propositions: Wittgenstein tells us that the totality of true propositions describes the world of natural science. Using the principle that the form of language reflects

that of its subject matter, Wittgenstein found in this circumscription of the content of language a starting point in the determination of its form. Accordingly, the second part of this chapter considers Wittgenstein's notion that there are limits to thought and language and that the philosopher (Wittgenstein himself) has the task of finding out where those limits lie. In this section I will try to make clear what it means to say that PL elucidates the workings of meaningful language when we do not have any examples of perspicuous propositions. In the third section, I turn to the actual role of PL in philosophical inquiry and, using the material developed in preceding chapters, I will outline the particular insights into the structure of ordinary language provided by PL.

I

Often one reads discussions of the following sort: the Vienna circle philosophers took the principle of verification from suggestions of it in the Tractatus. Logical positivism construes the Tractatus as stating that names refer to objects of experience or, more narrowly, to sense-data. But, these discussions add, Wittgenstein did not see it as his duty, as a philosopher and logician, to say what objects and atomic states of affairs were; these things were to be left to other kinds of inquiry.[1]

To a point, I have supported this criticism of the positivistic understanding of the Tractatus. In chapter three we saw that objects are not sense-data or "simple" objects of perception. One may never be

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[1]See Anscombe's discussion of Schlick's "Meaning and Verification" in Introduction, p. 152 ff. for an example of this kind of interpretation.

acquainted with an atomic fact which, unlike most empirical states of affairs, is independent from (cannot be deduced from and is not contrary to) other atomic states of affairs. Yet Wittgenstein is an empiricist, and it is this empiricistic character of the Tractatus (not: its empirical character) which attracted the positivists to it.

> In order to tell whether a picture is true or false we must compare it with reality. (2.223)
>
> There are no pictures that are true a priori. (2.225)
>
> Reality is compared with propositions. (4.05)
>
> A proposition can be true or false only in virtue of being a picture of reality. (4.06)

Propositions must describe a world with which we have some independent contact; it must be possible to compare a proposition with reality. Wittgenstein does offer a principle of verification:

> But in order to be able to say that a point is black or white, I must first know when a point is called black, and when white: in order to be able to say "p" is true (or false)', I must have determined in what circumstances I call 'p' true, and in so doing I determine the sense of the proposition. (4.063b)

This passage states that to "determine" the sense of a proposition I must know the conditions under which that proposition truly describes a fact. In virtue of what is a proposition verifiable? As I see it, there are two requirements: that propositions be confirmable in experience and that they be contingent. These requirements come together in Wittgenstein's doctrine that a language has meaning to a person only insofar as it is confirmable in the possible experience of that person.

> The limits of my language mean the limits of my world. (5.6)
>
> This remark provides the key to the problem, how much truth there is in solipsism.

> For what the solipsist means is quite correct; only it cannot be said, but makes itself manifest.
> The world is my world: this is manifest in the fact that the limits of language (of that language which alone I understand) mean the limits of my world.
> (5.62)
>
> This is connected with the fact that no part of our experience is at the same time a priori.
> Whatever we see could be other than it is.
> Whatever we can describe at all could be other than it is.
> There is no a priori order of things.
> (5.634)
>
> Here it can be seen that solipsism, when its implications are followed out strictly, coincides with pure realism. The self of solipsism shrinks to a point without extension, and there remains the reality co-ordinated with it.
> (5.64)

Traditionally solipsism has been defined as the belief that only one thinking subject exists. Wittgenstein's views on the limits of language place thinking subjects outside the realm of what can be described, experienced, or confirmed. The assertion "there are no thinking subjects" is not meaningful, but what it tries to say is shown in language by the fact that no reference to thinking subjects is made. (The "empirical self", the object of psychological research, does exist as the set of mental pictures unique to a person.) The difference between the traditional solipsist and Wittgenstein is that the latter cannot, in his own language, even refer to himself. For what we are about here, the point is that language has meaning only in the context of my experience of reality, the thinking subject is not the object of any possible experience, and this is the basis for Wittgenstein's solipsistic claims.

The kind of inquiry that uses experience in establishing the truth-value of propositions is called "natural science".

> The totality of true propositions is the whole of natural science (or the whole corpus of the natural sciences).
> (4.11)

> Philosophy is not one of the natural sciences.
> (The word 'philosophy' must mean something whose place is above or below the natural sciences, not beside them.)
> (4.111)
>
> It must set limits to what can be thought; and, in doing so, to what cannot be thought.
> It must set limits to what cannot be thought by working outwards through what can be thought.
> (4.114)
>
> It will signify what cannot be said, by presenting clearly what can be said.
> (4.115)
>
> Philosophy sets limits to the much disputed sphere of natural science.
> (4.223)
>
> The correct method in philosophy would really be the following: to say nothing except what can be said, i.e., propositions of natural science - i.e., something that has nothing to do with philosophy - and then, whenever someone else wanted to say something metaphysical, to demonstrate to him that he had failed to give a meaning to certain signs in his propositions. Although it would not be satisfying to the other person - he would not have the feeling that we were teaching him philosophy - this method would be the only strictly correct one.
> (6.53)

One could question how, in the pursuit of natural science, propositions describing unexperienced objects are connected to experiences. Another problem is that Wittgenstein's demand that a proposition have a determinate sense and that a proposition use "old" (presumably public) words to convey a new sense (3.25, 3.251, 4.021, 4.03) appears to conflict with the suggestion in 5.6 ff. that each apparently public statement would be understood in the light of each individual's experience, so that I have "my language" and you have yours. In the case of the first issue Wittgenstein says little to help us, and while in the second much is made of the determinate analysis possible for every meaningful proposition, the discussion of solipsism is short and obscure.

We can say that Wittgenstein's scientific world is, in an important sense, unlimited. Anything logically possible goes. The framework of

science is Humean, reflecting the fact that language is truth-functional and that there are no necessary connections among atomic states of affairs. The only necessarily true propositions are irrefutable and unconfirmable, for they are true under all conditions. After saying that tautologies are not essential in a "suitable notation", Wittgenstein says,

> This throws some light on the question why logical propositions cannot be confirmed by experience any more than they can be refuted by it. Not only must a proposition of logic be irrefutable by any possible experience, but it must also be unconfirmable by any possible experience.
>
> (6.1222)

Philosophy cannot be an empirical study. Not only does philosophy fall outside the realm of meaningful discourse, but all other a priori claims and theories do so as well. The Tractatus itself, written in the nonsensical propositions of the ladder language (6.54), is condemned by this doctrine.

II

The content of meaningful language is given to the philosopher by science and, one would suppose, everyday experience. At least these sources provide examples of meaningful language. What then does it mean to say, as Wittgenstein does in 4.223, that philosophy sets limits to natural science? Wittgenstein also says that philosophy determines the limits of language. Seeing the need to restrict attempts to say things to what is empirically accessible and logically possible, the philosopher provides a critique of linguistic representation meeting these requirements. Being interested in the form of any meaningful language and not merely an artificial one, Wittgenstein thought of

himself as offering a description of the essential features of language rather than a stipulation of them. Any meaningful proposition must meet certain requirements with respect to form (truth-functionality, subject-predicate, etc.) and the philosopher is the one who, in describing these requirements, sets its limits.

How can the philosophical description of essential features of language be conveyed? Strictly speaking, these features are "shown" in language. It is a mistake to think that only perspicuous propositions show these features. An interpretation of this sort seems plausible because Wittgenstein himself appears to have a privileged access to these propositions. On this interpretation Wittgenstein seems to be reporting back to us about their special nature.

In the introduction I spoke of a view of the Tractatus on which Wittgenstein, as Copi says, had a "tendency to reject ordinary language." Wittgenstein's theory of picturing is limited, on this view, only to elementary propositions. And if this limitation is made only elementary propositions show the form in which we are interested. Copi says that "the picture theory of meaning is intended for elementary propositions only."[2] Copi offers two arguments for this view, the first taken from 2.131:

> In a picture the elements of the picture are the representatives of objects.
>
> (2.131)

Copi tells us that a proposition which is not elementary, such as " p", cannot be a picture because " " is not the representative of an object (4.0312). Copi's second argument rests on the claim that a proposition

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[2] I.M. Copi, "Objects, Properties, and Relations in the 'Tractatus'", in Essays, p. 172.

and what it represents must share the same multiplicity of elements.

> It is only in so far as a proposition is logically segmented that it is a picture of a situation.
> (Even the proposition, Ambulo, is composite: for its stem with a different ending yields a different sense, and so does its ending with a different stem.)
> (4.032)
>
> In a proposition there must be exactly as many distinguishable parts as in the situation that it represents.
> The two must possess the same logical (mathematical) multiplicity. (Compare Hertz's mechanics on dynamical models.)
> (4.04)

Since an ordinary language proposition and its perspicuous analysis in PL would not be expected to have the same number of elements, the former cannot be a picture.

With respect to the second argument, I have interpreted 4.032 as a statement about all meaningful propositions (chapter two). While 4.04 appears to speak only of fully analysed propositions, Wittgenstein's example in this discussion of multiplicity is the proposition "(x).fx" (4.0411). Neither "ambulo" nor "(x).fx" is an elementary proposition. Thus I conclude that these passages are not merely descriptions of elementary propositions.

The " " in " p" is certainly an element of that proposition. 2.131 would appear to demand that if " p" is a picture, " " represents an object. But logical connectives are not representatives of objects. A similar argument denying pictorial status to ordinary language propositions could be taken from 3.1432. 3.1432 says that, in "aRb", that "a" is related to "b" in a certain manner says that aRb. Ordinary language propositions contain relational terms, which on this account do not refer to relations but aid in determining relations among signs. Consequently "aRb" would not be a picture because "R" does not stand for

an object. But Wittgenstein tells us that "aRb" is a picture.

> It is obvious that a proposition of the form 'aRb' strikes us as a picture. In this case the sign is obviously a likeness of what is signified.
>
> (4.012)

For this reason I propose that 2.131 be read as stating that, in a picture, names are the representatives of objects.

The broader conclusion is that Wittgenstein, throughout the Tractatus, is striving to convey a theory about all meaningful language. This conclusion is consistent with Wittgenstein's own statements of purpose I quoted in the introduction above. If ordinary language propositions were not pictures, it would not be required that they share their form with that which they represent. But Wittgenstein does make this requirement.

> What any picture, of whatever form, must have in common with reality, in order to be able to depict it - correctly or incorrectly - in any way at all, is logical form, i.e. the form of reality.
>
> (2.18)

> A proposition is a picture of reality.
> A proposition is a model of reality as we imagine it.
>
> (4.01)

> At first sight a proposition - one set out on the printed page, for example - does not seem to be a picture of the reality with which it is concerned. But no more does musical notation at first sight seem to be a picture of music, nor our phonetic notation (the alphabet) to be a picture of our speech.
>
> And yet these sign-languages prove to be pictures, even in the ordinary sense, of what they represent.
>
> (4.011)

> A proposition shows its sense.
> A proposition shows how things stand if it is true. And it says that they do so stand.
>
> (4.022)

Can philosophers describe (say things about) what is shown? Wittgenstein would admit that they certainly attempt to. Some philosophers have attempted to redeem the Tractatus from the conflict between ladder

language statements and Wittgenstein's theory of meaning. B.F. McGuiness argues that philosophy can convey a knowledge of form without talking about it.

> It might be thought that I have erred, or even that Wittgenstein erred, against the principle that a picture cannot depict its form of depiction (2.172 - 2.174) and that we cannot represent the logical form of a proposition or a fact by a proposition (4.12 - 4.121). However the full subtlety of his position is brought out by the fact that I have not erred in this way. I have not explained what the logical form of anything is, I have merely produced other things of the same logical form...[3]

Black argues that

> ...there remains the alternative of treating many of his remarks as formal statements, 'showing' something that can be shown...A great many of Wittgenstein's remarks can be salvaged in this way - indeed all those that belong to 'logical syntax' or philosophical grammar. For all such remarks are a priori but involve no violations of the rules of logical syntax.[4]

According to McGuiness, we can say that the form of "aRb" is shared with all propositions of the form "Øx,y", so that we do not state what the form of "aRb" is. Black believes that Wittgenstein's ladder language descriptions of language show the form of language without stating what it is. While I am more sympathetic with McGuiness's view (I can see no way Black's position can avoid major revisions of Tractatus doctrine, since Wittgenstein claims that all a priori truths are tautologies...) it must be admitted by both that philosophers do use the phrase "logical form" and it is relevant to ask whether assertations containing it are meaningful. That is, is there a proposition or set of propositions of

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[3]B.F. McGuiness, "Pictures and Form in Wittgenstein's Tractatus", in Essays, p. 151.

[4]Max Black, A Companion to Wittgenstein's Tractatus, p. 381.

PL which has the same meaning as a typical Tractatus assertion about logical form? I think Wittgenstein's answer would be emphatically negative. Thus there is something wrong with philosophical claims, even if McGuiness is correct in saying that propositions violating the ineffability requirement have not been produced.

McGuiness's view is that one way of conveying a knowledge of form is to produce other propositions of the same form, or to refer to them through propositional variables. This view is correct because a form, as we found in chapter one, is itself a set of possibilities. But we need not demand that "aRb" or "Øx,y" be perspicuous. The theory Wittgenstein offers is a theory about any proposition or any picture whether or not it is in fully analysed form.

It remains possible that we are mistaken when we conclude that "aRb" is of the form "Øx,y". This is because our knowledge of form begins from a visual similarity of certain propositions, but more is involved than this. We must know the perspicuous analysis of "aRb" before we can make a judgment with respect to its true form. Thus, although Wittgenstein's theory can be communicated to us without examples of perspicuous propositions, reference must be made to what would be the perspicuous analysis of meaningful propositions.

III

PL, an imaginary language, serves the purpose of bringing together several ideas concerning philosophically interesting and relevant aspects of language.

In 4.115 and 6.53 Wittgenstein says that philosophy signifies what cannot be said by presenting clearly what can be said. These passages

provide a clue to an understanding of the role of PL; PL is intimately involved in setting the limits of language. Wittgenstein does not "present clearly what can be said" by asserting propositions of natural science, nor does he offer examples of perspicuous propositions. Instead he describes the features of perspicuous propositions, and tells us what is significant about them.

If PL did exist - that is, if there were publicly acknowledged and understood examples of perspicuous propositions, then (perhaps) Wittgenstein would not feel compelled to speak in the ladder language. In the ladder language he tells us what we would (or should) discover in an inspection of PL. A knowledge of all meaningful language would be revealed in those propositions. But there are none available, and the Tractatus is an attempt to convey this knowledge to us.

First, let us consider predication. Because propositions of PL would consist only of names related or qualified without the use of predicate signs, we should see that what gives sense to a proposition, perspicuous or otherwise, is the fact that subjects stand in relation to one another or are qualified in some way. In the absence of actual perspicuous propositions, 3.1432, which speaks in the ladder language, makes this point.

Logical connections would be expressed in the "logical propositions" (tautologies) of PL. Their status as propositions which show but do not say would be apparent. Actually, we need not go to PL to have the nature of logical connectives shown to us. A "suitable notation", that is, a symbolic logic, would serve the purpose as well. Again, PL brings together several "ideal" features, features which need not be unique to it. In chapter four I referred to Wittgenstein's belief that tautologies

and contradictions show logical features of language and the world, and that they are themselves dependent upon logical properties of their constituents. PL would share with logical symbolisms whatever is required for the generation of propositions having any possible set of truth-conditions, and thus PL would show logical features of all meaningful language if we were able to inspect it.

Wittgenstein emphasizes that the most noteworthy value PL would have is that it would allow one to distinguish meaningful expressions from nonsense. The meaningfulness of a sign is not distinguished by its occurrence in PL, but by its occurring in propositions that can be generated from propositions of PL.

> Suppose that I am given all elementary propositions: then I can simply ask what propositions I can construct out of them. And there I have all propositions, and that fixes their limits. (4.51)
>
> Propositions comprise all that follows from the totality of all elementary propositions (and, of course, from its being the totality of them all). (Thus, in a certain sense, it could be said that all propositions were generalizations of elementary propositions.) (4.52)

In spite of the fact that we do not have any perspicuous propositions in front of us, we know that certain signs or complexes of them cannot be constructed from elementary propositions. The identity sign or propositions containing it, propositions referring to the "metaphysical self", ethical, philosophical, and theological assertions are meaningless.

PL is not a practical tool, at least at this point in human

history.[5] Yet a knowledge of its possibility is of philosophical value. Wittgenstein's view of philosophy is that it must take account not only of logical terms and the division between subject and predicate uses of words, but that it must distinguish between descriptive and non-descriptive functions of discourse. Although PL is not a real language, discussion of it allows Wittgenstein to expound a theory of logic and to elucidate the different functions of various kinds of signs.

Wittgenstein's Tractatus has one inherent difficulty, one which is mentioned in the closing remarks of most of its critics. The ladder language does not meet the Tractatus' requirements for meaningfulness. Without either condemning or defending Wittgenstein's attempt to speak the unspeakable, I think it is appropriate to once more mention the significance of his endeavor. Wittgenstein is one of the first philosophers to take the "linguistic turn", to believe that

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[5]One view is that elementary propositions are only ideals which can never be actualized. Speaking of the fact that, in Wittgenstein's theory, elementary propositions are not contrary to others, Richard Bernstein says,

> If this strong requirement for independence is to hold, and if we accept the premiss that the perspicuous language is intended to elucidate how we describe the world, then I think we are forced to the conclusion that in some sense there are no elementary propositions. The "existence" of elementary propositions is a logical requirement or presupposition for the possibility of meaningful discourse. Elementary propositions are not, however, a type of proposition for which we shall some day discover examples. They are conceived in thought, but not exhibited in actuality.

Given the empirical bias of the Tractatus, there is no basis for this claim. The search for scientific knowledge could have as one of its practical goals atomic facts and representations of them. Of course, one could suspect, as Bernstein must, that no states of affairs will ever be found which meet the independence requirement. (Bernstein, "Wittgenstein's Three Languages", in Essays, p. 241).

a study of the common features (and, in Wittgenstein's eyes, essential features) of our description of the world is of value in the promulgation of theories about the world and our cognition and representation of it. Linguistic theory cannot be the basis of ontological theory in the sense that ontological truths can be deduced from a theory of language, nor is this the message of the Tractatus. But a study of language can be an aid in the elucidation and clarification of our philosophical theories. That the ladder language appears to have significance for us, and for the author of the Tractatus, is a mystery, at least from a Tractarian point of view. But this does not imply that the endeavor to combine linguistic and ontological pursuits in an attempt for greater philosophical understanding is hopeless in its vision. Rather than recommending that such a search be abandoned, I would say that a greater scope of inquiry, combined with the demand for logical coherence and rigor found in the Tractatus, is the most fruitful path to philosophical knowledge.

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